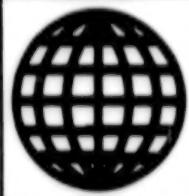


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CONTENTS

22 April 1992

CIS/RUSSIAN MILITARY ISSUES

CIS/RUSSIA ARMED FORCES

Thoughts on Spring Demobilization of Draftees <i>[KOMSOMOLSKAYA PRAVDA 31 Mar]</i>	1
Russian 14th Army Chief on Dniester Issues <i>[ARGUMENTY I FAKTY No 14, Apr]</i>	1
Servicemen's Groups' Observers' Council Signs Pact With Government <i>[MOSKOVSKAYA PRAVDA 2 Apr]</i>	2
Soldiers Polled on Contract Service <i>[KRASNAYA ZVEZDA 15 Apr]</i>	2
Military Aviation Research Center in Latvia Requests Russian Jurisdiction <i>[KRASNAYA ZVEZDA 15 Apr]</i>	3

CIS: POLICY

Lt-Gen Manilov Attacked for Role in Coup <i>[KURANTY No 54 (319), 19 Mar]</i>	4
Move to Assert Legal Control Over Russian Defense Ministry <i>[ROSSIYSKAYA GAZETA 1 Apr]</i>	4
General Staff Officer on Division of Weaponry <i>[GOLOS UKRAINY 2 Apr]</i>	4

CIS: AIR, AIR DEFENSE FORCES

Discussion of Air Forces CinC Deynekin's Visit to Ukraine <i>[NEZAVISIMAYA GAZETA 27 Mar]</i>	5
Chief of Air Force Main Staff Malyukov Interviewed <i>[KRYLYA RODINY No 11, Nov]</i>	6
General Description of A-50 AWACS <i>[VOYENNYYE ZNANIYA No 8, Aug]</i>	9
Stealth Threat to Air Defense, Part II <i>[VESTNIK PROTIVOVOZDUSHNOY OBORONY No 1, Jan]</i>	10

CIS: NAVAL FORCES

Rear Adm Belyshev: Moving Fleet Into Market Economy <i>[MORSKOY SBORNIK No 1, Jan]</i>	12
Rear Adm Kovalchuk on Requirements of Cadet Training <i>[MORSKOY SBORNIK No 1, Jan]</i>	18
Safety Factors in Submarine Operations <i>[MORSKOY SBORNIK No 1, Jan]</i>	21
Role of Carriers in Balanced Fleet <i>[MORSKOY SBORNIK No 1, Jan]</i>	25
Does Fleet Need Aviation Schools? <i>[MORSKOY SBORNIK No 1, Jan]</i>	29
Recent Events in Crimea, Fleet Reviewed <i>[NARODNAYA ARMIYA 31 Mar]</i>	31
Money from Ship Disposal to Fund Housing <i>[KRASNAYA ZVEZDA 1 Apr]</i>	32
Circumstances Surrounding Poti Fleet Units Viewed <i>[KRASNAYA ZVEZDA 4 Apr]</i>	33

CIS: REAR SERVICES, SUPPORT ISSUES

Ministry Directive D-57 on Military Financial Activity in Market Economy <i>[VOYENNYY VESTNIK No 11, Nov]</i>	34
Rail Transport of Hazardous Freight <i>[TEKHNIKA I VOORUZHENIYE No 12, Dec]</i>	35
Difficult State of Transcaucasus MD Rear Services <i>[TYL VOORUZHENNYKH SIL No 12, Dec]</i>	37
40 Motor Vehicle Battalions Detailed for Spring Sowing <i>[KRASNAYA ZVEZDA 2 Apr]</i>	41
Construction Officer on Difficulties Facing Apartment Construction <i>[NARODNAYA ARMIYA 4 Apr]</i>	42

STATE AND LOCAL MILITARY FORCES

INTERREGIONAL MILITARY ISSUES

Border Troops Chief on Moldova-Ukraine Border Situation	<i>[NARODNAYA ARMIYA 21 Mar]</i>	44
Stumbling Blocks Ahead of CIS Peacekeeping Force	<i>[KOMSOMOLSKAYA PRAVDA 31 Mar]</i>	44
Crimean Officers' Union Created	<i>[NARODNAYA ARMIYA 31 Mar]</i>	45

UKRAINE

Ukrainian Military Appointments	<i>[NARODNAYA ARMIYA 21 Mar]</i>	45
Defense Minister Morozov Interviewed	<i>[VESTNIK PROTIVOVOZDUSHNOY OBORONY No 1, Jan]</i>	45
Morozov: 'Ukraine Will Never Have Strategic Tasks Beyond Its Borders'	<i>[NARODNAYA ARMIYA 25 Mar]</i>	48
Morozov Addresses Officers' Union	<i>[GOLOS UKRAINY 7 Apr]</i>	50
Deputy Chief of 'Social Defense' Committee Discusses Tasks	<i>[NARODNAYA ARMIYA 11 Mar]</i>	51
Ukraine Said To Consider Own Fleet Command	<i>[ARGUMENTY I FAKTY No 14, Apr]</i>	52
Carpathian MD Commander on Number Taking Ukrainian Oath	<i>[NARODNAYA ARMIYA 31 Mar]</i>	53
Carpathian MD Commander Describes Force Changes	<i>[KRASNAYA ZVEZDA 10 Apr]</i>	53
Background to Officers' Union Congress	<i>[NARODNAYA ARMIYA 28 Mar]</i>	54
Officer's Union Faces New Tasks	<i>[NARODNAYA ARMIYA 4 Apr]</i>	56

BYELARUS

Local Recruits Solve Language Problems	<i>[KRASNAYA ZVEZDA 8 Apr]</i>	57
--	--------------------------------	----

CENTRAL ASIAN STATES

Nazarbayev Issues Decree on Conscription	<i>[KRASNAYA ZVEZDA 4 Apr]</i>	58
Turkmenia Decree on Servicemen in Other Republics	<i>[TURKMENSKAYA ISKRA 24 Feb]</i>	58

GENERAL ISSUES

DEFENSE INDUSTRY

Privatization of Polet Aviation Association	<i>[BIZNESS REVYU No 2 (7), Feb-Mar]</i>	59
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CIS/RUSSIA ARMED FORCES

Thoughts on Spring Demobilization of Draftees

92UM0848A Moscow KOMSOMOLSKAYA PRAVDA
in Russian 31 Mar 92 p 1

[Article by A. Khokhlov: "Those Who Have Not Deserted Await the Order"]

[Text] Phenological signs have ceased to appear over the expanses of the CIS [Commonwealth of Independent States]. The arrival of spring was formerly distinguished by sunny days, the return of migratory birds and the demobilization of soldiers. Today there is neither sunshine nor demobilized soldiers. The Agreement on Principles for Manning the Joint Armed Forces of the CIS and on Serving in Them was signed at the last meeting of the heads of state in Kiev. The agreement stated that the release of servicemen into the reserve was the prerogative of the commander in chief of the Joint Armed Forces, while the draft was the prerogative of the presidents and parliaments of the CIS nations. As could have been expected, there have yet been neither orders nor decrees on the matter. Specialists with the General Staff of the Joint Armed Forces of the CIS prepared and sent out the documents back on 15 March. On 28 March the draft order was returned to the General Staff from Marshal Ye. Shaposhnikov's agency. Indeed, just how could soldiers be released when there are no replacements! The document was lost altogether in the bowels of Russia's government. Polite reminders to the military on the need to resolve this matter in the immediate future were perceived by one official in charge as an attempt to establish control over him and his subordinates. The Directorate of Affairs of the Commander in Chief of the Joint Armed Forces knows only one thing for sure. It is that every CIS state must itself determine how many people need to be drafted into the Joint Armed Forces, who should be drafted and when. Not one of them has the laws yet, however. The Kiev agreement on the manning of the armed forces has been left hanging in the air. Soldiers who have served out their term want to return home no less than migratory birds. When I was in the service there was an eloquent saying among the raw recruits and the one-year veterans: "Demobilization is as inevitable as the victory of communism." The matter of communism is now clear. But what about that release into the reserve? It is not very likely that today's soldiers will wait patiently and long for the cherished decrees from a dozen presidents. These are not the old times, they will say, when one was assigned to the military for 25 years.

Russian 14th Army Chief on Dniester Issues

92UN1135A Moscow ARGUMENTY I FAKTY
in Russian No 14, Apr 92 p 4

[Interview with Major-General Yu. Netkachev, commander of the 14th Russian Combined-arms Army, by S. Bogdanov under the "In the Zone of Conflict" rubric; place and date not given: "Left Bank, Right Bank... and the Army in the Middle"]

[Text] "There remain no more than two weeks for a solution to the Dniester region if people are not to end up looking at one another through rifle sights," believes Major-General Yu. Netkachev, commander of the 14th Russian combined-arms army, whose units are stationed in Moldova. The military journalist S. Bogdanov talks with him.

[Bogdanov] Today you are a Russian soldier. Do you believe that we should protect our countrymen in the Dniester region?

[Netkachev] We are obligated to protect all the people who have clothed and fed us. Independent of which side of the Dniester they live on.

[Bogdanov] What does B. Yeltsin's decree transferring the 14th army under the jurisdiction of Russia mean specifically for the 14th army?

[Netkachev] While we belonged to the Armed Forces of the Commonwealth, it was as though we were "nobody's." Since the beginning of the conflict each of the opposing parties has constantly made efforts to enlist the support of the servicemen. Every means has been used to achieve this goal. President Yeltsin's decree has stabilized the situation in the army to a significant degree. Now we are subordinate to Russia.

[Bogdanov] After bringing the 14th army to a heightened state of alert, what will be your next step?

[Netkachev] In general, we do not wish to undertake any steps and involve ourselves in this butchery. All problems should be decided by political means. Otherwise there will be no avoiding a great number of victims.

[Bogdanov] What position does the officers' assembly take?

[Netkachev] It is difficult for us to constantly hear complaints that the military cannot protect peaceful residents. Against whom should we use our weapons? People in this region always lived and worked together. If the 14th army eventually takes part in the conflict, it will only be as an intermediary. It is difficult for the officers in the Dniester region. Many have family and relatives here. There is constant pressure on the officers and the command of the units. But we will not start fighting one another.

[Bogdanov] How likely are unsanctioned actions of officers under such circumstances?

[Netkachev] There has never been any such thing in our army. Undoubtedly the officers react negatively to the fact that almost all military units are blockaded, and the servicemen themselves are constantly subjected to cruel pressure. You see, only in our country do military men have to ignore violent actions against them, as well as

attempts to seize equipment and arms. But our patience cannot be abused endlessly. The officers are extremely dissatisfied with the position they are in, and it is difficult for the command of the army to restrain such moods. However we must be realists: If the attack on the military units of the 14th army continues and, God forbid, there are casualties, then the inevitable may occur.

[Bogdanov] Is the 14th army fully supplied with its own weapons?

[Netkachev] Despite antipersonnel mine fields we installed, warehouses of weapons have been attacked several times. Women, Cossacks, and local guard units have tried to seize weapons. If in a critical situation weapons are subject to a threat of seizure, we will be compelled to destroy military equipment.

[Bogdanov] Do you note an increase in military preparations after the introduction by Moldova of a state of emergency?

[Netkachev] For the time being there are no active military actions underway, but we constantly hear automatic fire. In the region of the conflict Moldovan police subunits are being drafted constantly. Often there are provocations. Unfortunately there are victims among the civilian population. In the event of an outbreak of large scale combat operations, the side which initiates them will suffer great losses.

[Bogdanov] How are negotiations going?

[Netkachev] With difficulty. Under the existing situation every step forward at the bilateral negotiations of the leadership of Moldova and the PMR [Dniester Moldova Republic] is an achievement. Negotiations at the level of the Russian Ministry of Foreign Affairs, Ukraine, Moldova, and Romania are also progressing slowly.

[Bogdanov] In your opinion, how will events in the Dniester region develop? What role may be assigned to the military?

[Netkachev] Both parties are increasing their military potential. If the conflicts are not halted, then in a short time there will be on the territory of the former Union another Karabakh and South Ossetia rolled together, but in the Dniester region this time. The heads of the CIS need to apply all efforts to avoid further bloodshed. Not one serviceman will leave the territory of his unit without the appropriate order of the Russian Government. Under the existing situation it is advisable to use military forces only for the creation of a neutral zone that will separate the opposing parties. The 14th army will not participate in an armed conflict. No one is permitted to shed the blood of Russian soldiers and officers for the sake of anyone's ambitions. That is incontrovertible.

Servicemen's Groups' Observers' Council Signs Pact With Government

*92P50108A Moscow MOSKOVSKAYA PRAVDA
in Russian 2 Apr 92 p 1*

[Unattributed item: "In the Government of Russia": "Observers' Council Created"]

[Text] Yegor Gaydar, vice premier of the Government of the Russian Federation, and representatives of the Observers' Council (OC) of Servicemen's Organizations have signed a protocol on cooperation. The first foundation stone has thereby been laid in constructing an effective mechanism for joint work by the republic's government with all organizations wishing to lower social tension in the Armed Forces and to stabilize the economic situation in the country.

For now, 18 servicemen's organizations have joined the Observers' Council, Col Aleksandr Maksimov, OC member and chairman of the Independent Servicemen's Union, said in an interview with ITAR-TASS. Aleksandr Maksimov said that on the base of the OC, it is planned to create an association of public army structures, which will receive juridical status. This will permit us to more effectively work together with state organs.

According to the protocol, the Russian Federation Government intends to cooperate in the realization of programs worked out by the OC for the social protection of servicemen and does not intend to permit the adoption on the state level of relevant documents which have not been vetted by the council.

The creation of a joint commission, to carry out the tasks of the OC and to prepare an agreement on the procedure for joint action by the republic's government and the OC, was noted. The agreement will be open for signing by all organizations concerned with the social protection of servicemen.

Soldiers Polled on Contract Service

*92UM0900A Moscow KRASNAYA ZVEZDA in Russian
15 Apr 92 p 2*

[Article by Lt Col S. Chuprov in the column: "A Sociological Survey": "Contract Service: Are There Many Takers?"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] Work on rewriting the principal documents outlining the procedures for instituting the recruitment of personnel for the CIS OVS [Unified Armed Forces] is nearing completion. One of the documents deals with the details of military service for enlisted men, seamen, sergeants, and senior noncommissioned officer personnel under contract arrangement. A draft of this document was published in the 10 March 1992 issue of KRASNAYA ZVEZDA. What are the opinions relative to contract service and its particulars on the part of those men who can serve in the service categories?

Answers to the above question are provided by a survey of 1,200 conscript servicemen and draft-eligible men carried out in nine military districts by the Armed Forces Center for Military Sociological, Psychological, and Legal Research. The results indicate that there is a social basis for recruiting personnel for contract service in the Strategic Forces and the Special-Purpose Forces. However, there lately has been a trend toward reduction of this basis. Thus, in January of 1990, a desire to accept contract service was indicated by 67 percent of those surveyed; in September 1991, by 47 percent; but, at present, by only 36 percent. This is accompanied by changes in reasons for choices. The reason given as late as January 1990 in the overwhelming majority of cases was putting oneself to the test and an interest in attaining general fitness (submitted by 50 percent of respondents). However, starting in 1991, a desire to acquire material benefits jumped to first place. The latter in September 1991 was cited in 43 percent of the cases, while now every second respondent is so inclined. In addition, of those who preferred contract service, there were many interested in serving only within the boundaries of their respective republic. In this connection, 67 percent prefer to be stationed close to their parents' residence.

The above results, one may infer, predetermined the appearance of the rewritten draft of service conditions. It is generally found satisfactory by more than 60 percent of those surveyed, including respondents who indicated a preference for contract service. However, the draft is acceptable to only 13 percent of the total number of men surveyed and 24 percent of those who prefer the volunteer type of service.

We ascribe the above figures to the fact that all persons indicating an interest in contract service were in favor of the free uniform and food ration benefits (75 to 98 percent of those surveyed, depending upon the particular benefit). On the other hand, they were very demanding with regard to living conditions and housing. For example, only one in ten men would agree to live in separate barracks for bachelors. Most soldiers would prefer to be assigned a private apartment, with monetary coverage of actual costs involved.

What did the men have to say about military pay? The base monthly pay (depending upon the service conditions: up to R4,085 [rubles] in the Ground Forces; to R5,240 in the Air Force; to R6,580 in the Navy) is acceptable to about 70 percent of those in favor of contract service. Also acceptable are the additional amounts (for annual performance rating, contract extension, years of service, qualifications, and service in remote areas with severe climatic conditions). From 60 to 80 percent of those surveyed were in favor of the preceding, depending upon the particular condition

listed in the draft. Approximately 60 percent indicated acceptability of the pay for the various service classifications (to R1,570 for privates, to R1,780 for sergeants and senior NCOs, to R1,920 for sergeants and senior NCOs filling warrant officer billets). Concerning pay for rank held, the survey showed that the amounts were far too low, satisfying less than half the men in favor of contract service.

Thus, opinions were compiled relative to the draft of the military service contract conditions for soldiers, seamen, sergeants, and senior NCOs. They testify that after the document is rewritten and endowed with the force of law, it should be possible to go ahead and initiate recruitment for contract service. There will be takers.

But what will tomorrow bring?

Military Aviation Research Center in Latvia Requests Russian Jurisdiction

92UM0901A Moscow Krasnaya Zvezda in Russian
15 Apr 92 p 3

[Article by Colonel M. Ziyeminsh under the "Direct Line" rubric: "Ignore Now, Regret Later"]

[Text] It was in October of last year that the collective of the Riga Higher Military Aviation Engineering School imeni Yakov Alksnis requested the Russian Federation Parliament to accept the military school as being under the jurisdiction of Russia. For that time, the request was somewhat unusual, even provocative in a sense, for there was not even a hint of a breakup of the Armed Forces.

However, it was not merely a question of survival of any one person or any number of persons that compelled school representatives to make their appeal to the Russian Parliament in October of last year. This step was dictated by another purpose—one more important—that of protecting the school's scientific potential for the Russian state. It is sufficient to say that working in the school are 12 doctors of technical sciences and 184 candidates of technical sciences. The institution is engaged in scientific research in the area of aviation and space technology, including the creation and development of the Buran orbital space complex.

Most troubling to the Riga school's collective is the institution's uncertain future. It is slated for relocation from Latvian soil. But the school's collective has more than a passing interest in its future location and how the move will be made. The majority of the permanent employees when surveyed indicated their interest in continuing their teaching and scientific activities in Saint Petersburg. A verbal agreement to this effect has been made with Anatoliy Sobchak, the mayor of the city on the Neva.

CIS: POLICY**Lt-Gen Manilov Attacked for Role in Coup**

*92UM0858A Moscow KURANTY in Russian
No 54 (319), 19 Mar 92 p 4*

[Article by Colonel O. Nikonov, expert of the former USSR Supreme Soviet Parliamentary Commission for the Investigation of the Causes and Circumstances of the Coup D'Etat in the USSR: "Manilovshchina" at CIS General Headquarters"]

[Text] Truly, however much "halva" you talk, the inside of your mouth does not become sweet. And that is how it is with the matter of reform of the Armed Forces: however much you expound about the advance of thorough changes in the army from the highest rostrums, there actually aren't any. Relations here, as they were before, have remained Mafioso-nepotistic. Especially in the leading structures where the "Boldinskiy effect" continues to preserve the former micro-climate of stagnation. The matter is being reduced to anecdotal situations when CIS [Commonwealth of Independent States] Commander-in-Chief Marshal of Aviation Ye. Shaposhnikov is compelled to say on questions of his direct competence that have been posed to him while shrugging his shoulders with embarrassment: "I know nothing of this" or "I am hearing this for the first time"...

That is how it was when people began talking about his decision with regard to the written appeal of Minister of Press and Information M. Poltoranin on the need for thorough reform of the military mass media. It turned out that the letter had not reached the commander-in-chief and it is unclear who made the decision to reject reform due to its "inadvisability."

The same thing is occurring with appeals with regard to the restoration of illegally released officers and other decisions on cadre issues. I wager that the commander-in-chief also does not know what classic manipulations are being conducted behind his back with assignments, say, to the very prestigious and adequately lucrative, according to the current meager times, Western Group of Forces. Just as before, they are being sent here on temporary duty assignments for a solid bribe.

Everything that the Commission on Reform of the Military Press headed by M. Nenashev did at one time—and this was really a new approach in cadre policy: candidates for the positions of editors of newspapers and magazines defended their own programs and broadly and openly discussed them—all of this has been destroyed in a very short period of time. The commission has ceased to exist and now Information Directorate Chief Lieutenant-General V. Manilov is running things here singlehandedly. This is that same general, from among Yazov's closest associates, who quite aggressively opposed the defenders of the White House in the days of the August events and who knowingly disseminated false information in the press that disoriented world society and the Armed Forces. Colonel V. Lopatin, deputy

chairman of the State Committee on Defense Issues, quite precisely and reasonably discussed Manilov's true role in the putsch during the parliamentary hearings of the Russian commission that is investigating the causes and circumstances of the coup d'etat. But no reaction whatsoever has followed to this.

First of all because the commander-in-chief himself did not want to hear about this, having demonstratively left the hall as soon as Lopatin began to speak and, secondly (of this I am absolutely convinced), it is extremely advantageous for someone of Shaposhnikov's closest entourage that "Manilovshchina" [the Manilov phenomenon] flourish instead of really democratic changes in the army at all levels. Dream, they say, comrade officers, you are still not prohibited from doing that...

Move to Assert Legal Control Over Russian Defense Ministry

*92UM0858B Moscow ROSSIYSKAYA GAZETA
in Russian 1 Apr 92 p 2*

[Unattributed Article: "A Hostage to Personal Interests"]

[Text] A group of scientists, leaders of scientific centers and public figures have expressed serious concern with the situation that has arisen in connection with the impending creation of the Russian Ministry of Defense in an appeal to Russian Federation Supreme Soviet Chairman Ruslan Khasbulatov.

The appeal expressed alarm with regard to the fact that "not state but group and personal interests are prevailing in the approaches to the formation of the Russian Ministry of Defense."

In the scientists' opinion, the need emerges for legal regulation of activities in the defense sphere with the appearance of a military department and a national army in Russia. The scientists have proposed that the speaker of parliament examine the issue on providing legal regulation of the defense sphere at a Russian Federation Supreme Soviet Presidium session. They advocated the formation of a Russian Federation Supreme Soviet commission and a group of experts to monitor the work on the creation of the Russian Federation Ministry of Defense.

General Staff Officer on Division of Weaponry

*92UM0896A Kiev GOLOS UKRAINY in Russian
2 Apr 92 p 3*

[Article by Major-General Vadim Grechaninov, chief of the Center for Operational-Strategic Research of the General Staff of the Armed Forces of Ukraine: "Divorce Moscow-Style"]

[Text] One of the most acute problems in the "divorce" proceedings for the republics of the former USSR at the present time is that of achieving an equitable division of

the Soviet Army's weapons. The situation could be briefly described as an unconcealed disinclination on the part of the Russian delegation to overcome as equals the disagreements which presently exist among the republics and generally to conduct an honorable policy with respect to its neighbors.

There are three main aspects to the matter of dividing up the weapons among the CIS states: international legal, defensive and economic. The first consists in the fact that under the Agreement on Conventional Armed Forces in Europe, signed by the USSR and 21 other nations in Paris on 19 November 1990, the sovereign republics of our commonwealth, as successors to the Soviet Union, are to have a quantity of conventional weapons and combat equipment not exceeding the level established by the Agreement 40 months after this document goes into effect.

That level is the following: 1,350 tanks, 20,000 armored vehicles, 13,175 artillery units, 5,150 combat aircraft and 1,500 attack helicopters. This level includes also regional sub-levels not to exceed the specific quotas for weapons and combat equipment in Ukraine, Byelorussia, Moldova, the Baltic area, Kaliningrad and Saint Petersburg oblasts.

A specific feature of the situation lies in the fact that at the present time, as a result of the recent confrontation of the Warsaw Pact and NATO, approximately half of the armored and aviation equipment deployed in the European part of the former USSR is located in Ukraine and Byelorussia. Respecting the interests of each of the participants and attempting to negotiate with all of them on an honorable and equal basis, the Ukrainian delegation at the outset proposed a "generalized figure" based on area of state territory, size of population and length of borders.

The percentages would be 54.1% for the Russian Federation, 24.8% for Ukraine, 6.6% for Byelorussia, 2.3% for Moldova, 3.8% for Georgia, 4.3% for Azerbaijan, 2.8% for Armenia and 4.3% for Kazakhstan.

From the very beginning of the talks Moscow's delegation assumed an arrogant posture toward the other participants. It asked for 8,800 tanks, for example, which is 66.1% of the overall quotas agreed upon. This naturally evoked acute disagreement in the other CIS states and united them against Russia in the talks. As a result, its delegation was forced with great reluctance to make concessions in its position. This resulted in an interview with Army Gen K. Kobets published in *IZVESTIYA*. Interestingly, while describing in the interview the problems stemming from the need to observe the Paris Agreement on Conventional Armed Forces in Europe for the CIS states, the Russian side now recognized the "generalized figure" method we had proposed for conducting the talks. Whether deliberate or not, the Russian Federation's state adviser lowered the figure for Ukraine from 24.8% to 21.8%. The portion of the tanks due our republic was correspondingly lower: only 2,867.

While in talks held in March Russia offered Ukraine somewhat more tanks and armored vehicles (27% and 25% respectively) than provided in the "generalized

figure," it attempted to slight us significantly in aircraft and attack helicopters (only 19.5% and 13.3%). This would greatly affect our defense interests. As the Persian Gulf War demonstrated, after all, the aviation is beginning to have the crucial role in modern combat. In addition, the proposed approach is detrimental to Ukraine in the economic respect. Everyone knows that it costs a great deal more to produce a combat aircraft or an attack helicopter than a tank, an armored personnel carrier or an infantry combat vehicle. We shall therefore not agree to such an unfair division, of course, for the two reasons. It also greatly slights Byelorussia, Moldova, Azerbaijan, Armenia and Georgia.

The Russian delegation's nonconstructive position in the talks goes far beyond the problems of dividing up the weapons and combat equipment of the former Soviet Army. It is extended to an invalid desire by Moscow to take control of all four military fleets. And this is not conducive to the strengthening of the Commonwealth, of course.

CIS: AIR, AIR DEFENSE FORCES

Discussion of Air Forces CinC Deynekin's Visit to Ukraine

92UM0847A Moscow NEZAVISIMAYA GAZETA
in Russian 27 Mar 92 pp 1, 3

[Article by Aleksandr Anin and Vladimir Svartsevich under the rubric "The Army": "Conversion Commerce and Combat Training: The Division Commander Did Not Wish to Speak With the Air Force Commander"]

[Text] On 21 March Petr Deynekin, commander of the Air Force of the CIS [Commonwealth of Independent States] Joint Armed Forces sent an encoded telegram to Konstantin Morozov, minister of defense of the Republic of Ukraine: "I am informing you that on 24 March of this year I plan to fly out to familiarize myself with the situation of the troops. My itinerary will be Chkalovskiy-Melitopol-Krivoy Rog-Poltava-Uzин-Lvov-Kiev-Chkalovskiy. Kiev sent a reply that same day, also in code, which forbade the colonel general to "fly over airfields of a neighboring state." It was explained that "since the list of formations and units of the OVS [Unified Armed Forces] defined by Ukraine as part of the strategic forces has not been agreed to, your (Deynekin's—A.A.) presence in Ukraine's armed forces is not expedient." On 24 March an encoded telegram was sent to the capital of Ukraine, this time from Yevgeniy Shaposhnikov, commander in chief of the CIS Joint Armed Forces, in which the marshal accused the leadership of the Ministry of Defense of the Republic of Ukraine of violating agreements reached by the Commonwealth states. Reproaching Kiev for taking unilateral action designed to disrupt the foundation of the combat training and the inspection of the Commonwealth's air force, the top CIS military man suggested that Petr Deynekin not be hampered in the performance of his service duties.

After that, at 09:30 on the 25th, as already reported in NEZAVISIMAYA GAZETA (No 59), Moscow received permission for the flight. It was rescinded at 09:42. Exactly one hour later Kiev once again opened up the skies for Deynekin to fly to Ukraine, and a few minutes later aircraft 65979 took off from a runway at the Chkalovskiy airfield near Moscow.

The first landing site was to be Uzin, which is 90 kilometers from Kiev. A long-range air division is stationed there, part of the strategic forces, which belong, of course, to the Commonwealth and are under the command of the Council of Heads of State. The formation stationed at Uzin includes a strike regiment of missile-carriers, a refueling tanker regiment and a support transport squadron. The division is commanded by Maj Gen Bashkirov, a student of Deynekin's, recently removed from that post at the order of Mar Shaposhnikov but appointed to the same post by Defense Minister of the Republic of Ukraine Morozov. The reasons for his removal, according to Gen Deynekin, were far from political (in my opinion, at least) and can therefore not be the subject of discussion in the newspaper if only because, also according to the commander in chief of the Air Force, he is subject to administrative and subsequently, criminal investigation.

This is not the essence of the conflict, however, but the fact that Ukraine's military command considers it necessary to promote two concepts, "attack strategy" and "attack support," that is, to convert the tanker regiment into a commercial structure, while still not ruling out its planned (perhaps with their own adjustments) participation in the division's combat training. The commander in chief's position is uncompromising. It is that the preventive, unplanned reorientation of just about half the personnel to perform an extraneous mission would render the formation simply unfit for combat. Furthermore—and this is obvious—this kind of division of pilots in a single division but different regiments would inevitably lead to almost classic opposition at the "rich and poor" level. Some of them would be earning money, while the others would seem to be on the sideline. It would appear that precisely this is what determined the political aspect of the conflict: to be specific, the attitude of officers in fraternal regiments toward the oath of loyalty to the people of Ukraine. The fact is that literally only individual commanders of the attack aircraft have sworn their loyalty to the people of Ukraine, whereas practically all of the tanker commanders have done so. The division's commander, Gen Bashkirov, is the official leader in the drive to "Ukrainianize," the Uzin division, or, as it is called in Moscow, the "mutinous" division. And so, commerce and politics plus dual command, unnatural for a military formation, were the subject of discussion at a meeting with commander in chief Deynekin and the crew commanders at Uzin. Incidentally, following a tasteful clash with the commander in chief and with the latter's permission, the division commander left the auditorium. He thereby

relieved himself of the doubtful pleasure of listening to the complaints of subordinates and their confrontational statements about him.

Returning to Moscow, now after a relatively soothing visit to the loyal 13th Guards Red Banner Sevastopol-Budapest Long-Range Air Division stationed near Poltava, Col Gen Petr Deynekin, commander of the Air Force of the CIS Joint Armed Forces, said that Bashkirov still faces discharge and that the "mutinous" strategic division will most likely become a transport division. The combat missile-carrying aircraft will be transferred, and yet another "conversion commerce" regiment will be formed at Uzin to replace it.

Chief of Air Force Main Staff Malyukov Interviewed

*92UM0809B Moscow KRYLYA RODINY in Russian
No 11, Nov 91 pp C2-1*

[Interview with Chief of the Air Force Main Staff Colonel-General of Aviation Anatoliy Ivanovich Malyukov by KRYLYA RODINY Correspondent Dmitry Grinyuk and Polish magazine VIRAZHI Correspondent Petr Butovski, date, place not given: "Unusual Conversation at the Main Staff"]

[Text] Chief of the Air Force Main Staff Colonel-General of Aviation A. Malyukov greeted us with a firm handshake. And a very unusual conversation began immediately. Why—judge for yourself...

[Grinyuk/Butovski] Anatoliy Ivanovich! You were recently assigned to this post. You are only 53 years old, and our readers are interested, well, say, how can they become generals?

[Malyukov] I was born near Murom in a village over the Oka. A pilot who had served at the front came to our school when I was in the tenth grade. He asked: "Who wants to become a pilot?" I followed his advice and joined the Vladimirskiy Aeroclub. This was a serious organization: theoretical training, parachute jumps, and nearly 40 hours of flying time in a Yak-18. Then, a year at the 93rd Naval Aviation School on the shore of the Gulf of Finland, near Leningrad, the famous Yeysk Fighter Pilot School, at that time imeni Stalin. I studied for a year but they totally reduced our class in 1958: they awarded us the rank of "reserve lieutenant" and released us. Many futures in aviation were destroyed at the end of the 1950's due to Khrushchev's excessive fascination with missiles. I was lucky—I was among ten men who were transferred from the second to the fourth, graduating class. From the Yak-18, bypassing the transition Yak-11, I went directly to the MiG-15 jet aircraft.

After graduation from the school—I was assigned to a second line regiment at Berdichev. Just what was that? At that time, there was a very good system of second line regiments (similar to the system of Air Force training centers that have currently been established). A pilot did not immediately find himself at a combat unit but first perfected his flying skills.

We managed to fly a little bit but these regiments were also eliminated in 1960. Later, life demonstrated that

this decision had been incorrect. Then I served in line units and at the 4th combat applications center. I graduated from the academy. I commanded a research-instructor regiment at Lipetsk and a division in the 16th Air Army in Germany. After the General Staff Academy, I became deputy commander of the 26th Air Army in Belorussia. I have mastered 17 types and modifications of aircraft and I have 3,000 flying hours. My last assignment before Moscow was in the Far East, commander of the 1st Air Army.

[Grinyuk/Butovski] You so freely use designations of armies and divisions and their deployment locations in an interview with journalists...

[Malyukov] Yes, this information was classified until quite recently. Now, of course, we can openly cite them after we have given this information to our negotiating partners on conventional arms reductions in Europe.

[Grinyuk/Butovski] The Persian Gulf War recently ended. The magazine is scrupulously summarizing the experience of engagements in the air. What is your opinion on these articles? Or... In an issue of KOMSO-MOLSKAYA PRAVDA, an interview was published with Soviet instructor pilots who had trained Iraqi pilots in the MiG-29 and they said that they had been trained no worse than the French. And suddenly they suffered a defeat...

[Malyukov] You cannot accept that war as a war in the classic sense of this word in which two tactics and two categories of professionals clashed and assess who was stronger and who was poorly trained and armed according to the results. It is clearly obvious from the magazine's articles that the superiority in the air of one side was not won but numerical superiority was created initially. Secondly, the opposing side did not do anything to disrupt, decrease, or change in any way this superiority in its favor. It did not undertake anything.

The Americans had overwhelming superiority in the air which freed them from solving a large circle of problems, both in ground operations and in the air. Thirdly, there was no organized resistance. Iraq did not utilize aviation in that context, say, as Egypt and Syria did in 1973 where there were coordinated combat operations, they were conducted according to a concept of operations, with tactics and organized, planned air battles and engagements. There were tactical groups, disinformation, cunning, and unexpected tactical methods there. In short, there was something to analyze and from which to make large-scale conclusions.

Well but the MiG-29—is a marvelous fighter aircraft. When the FRG [Federal Republic of Germany] received 20 MiG-29's along with all of the weapons of the former GDR [German Democratic Republic], they began to very intensively master them there: we have the response of the German and American pilots on the "Mig" (they tested it at the air base at Ramstein and air engagements were conducted with the F-15 and F-16). So: the professionals totally prefer the Soviet fighter aircraft.

Not only for the traditionally strong aspects of our aircraft, like aerodynamics and the airframe, but even electronics, the weapons system, and the gunsight.

[Grinyuk/Butovski] Among journalists, few have properly assessed this MiG-29 weapons system: its radar and electro-optical and helmet-mounted gunsights...

[Malyukov] Yes, even the Americans do not have a single aircraft in which the electronic and heating systems have been combined. And we have all of this in the MiG-29.

[Grinyuk/Butovski] What is your opinion on the first employment of the F-117 Stealth aircraft?

[Malyukov] Low signature [Stealth] certainly has a role to play but the F-117—if it was fighting somewhere in the European Theater of Combat Operations under conditions of rugged terrain and a developed PVO [Air Defense] system and strong and finely-tuned electronic countermeasures—would certainly not have so freely "roamed" as it did over the desert. We can only provide a full assessment to the aircraft after its operations under various conditions, with powerful enemy electronic and fire countermeasures.

Of course, while assessing the F-117, I need to say that this aircraft has opened a new direction of aircraft development.

[Grinyuk/Butovski] And what is being done in the USSR along this theme?

[Malyukov] We also have developments—they are currently being conducted in all countries that are developing their own aircraft. But we are not building a special aircraft in which all qualities have been sacrificed to its "stealthiness." We are simply stating requirements for stealth in any aircraft that is currently being designed. In general, we are in a difficult situation with regard to financing scientific research and experimental design work right now. It would be better to reduce aircraft purchases but to leave appropriations for NIOKR [scientific research and experimental design work]. For example, the Americans are not scrimping on research and they are preserving all of their programs. But reducing purchases means to shut down series production plants and to put thousands of people out of work. Conversion of production must be gradual.

In general, I need to specially say something about the new, precision-guided types of weapons, more precisely about the euphoria with regard to them. The combat effectiveness of guided missiles and bombs has hardly eliminated the value of simple and cheap weapons. Each guided missile costs a great deal of money, in many cases comparable with the cost of the target destroyed.

[Grinyuk/Butovski] Production of the MiG-29 has already been reduced. It is only being produced for export. Therefore, is it already no longer entering the Soviet Air Force?

[Malyukov] Yes, we have sufficient MiG-29's on line and right now the opinion of the Air Force main command authorities is such: do not disperse resources for equipment that do not allow for diversification of single-purpose aircraft. Develop the SU-27 base-model, make both a reconnaissance aircraft, fighter bomber, ECM aircraft, an all-weather interceptor, etc., based on it. But at any rate, both a light frontal aviation fighter aircraft and a fighter aircraft of a class like the SU-27—are needed. Production of the MiG-29's has not been terminated. There are many orders from abroad for both it and for the SU-27.

[Grinyuk/Butovski] And at what prices are they being sold?

[Malyukov] The Americans have offered us nearly \$50 million for the Sukhoi. Of course, the aircraft is interesting for them both from the point of view of flying characteristics and from the point of view of navigation and especially of the weapons that are similar to the MiG-29's. Only the data for the Su-27 is a bit better, the range is greater, and more modern technologies have been set forth in it.

[Grinyuk/Butovski] Anatoliy Ivanovich, please tell us about the reduction of combat aviation as a result of the international obligations that have been assumed by our country.

[Malyukov] In November 1991, as we all know, the Treaty on Conventional Armed Forces in Europe was signed. The area of application of the Treaty, if I can briefly describe it, is from the Atlantic to the Urals. They propose placing combat aircraft and helicopters, along with ground forces military equipment and weapons, under the force of the Treaty. The Soviet Union must reduce combat aircraft to the level of 5,150 aircraft and strike helicopters to 1,500. Frontal aviation combat aircraft, PVO fighter aircraft, medium bombers, and Air Force and PVO combat trainer aircraft fall under the restrictions. The treaty does not restrict the number of L-29 and L-39 trainer aircraft.

We have the right to reclassify up to 550 MiG-21U, MiG-23U, MiG-25U, SU-15U, and SU-17U (of them no more than 130 aircraft can be MiG-25U's) combat trainer aircraft into unarmed trainer aircraft which are not counted in the prescribed restrictions. Furthermore, our country has been given the right to have 100 Mi-24K and Mi-24R helicopters. While taking this into account, the actual level of aircraft for the USSR for helicopters totals 1,600 aircraft.

At the negotiations, the Soviet Union announced the total number of combat aircraft—6,611 (including Air Force—4,323) and strike helicopters—1,338 (including Air Force—225). After realization of the treaty obligations, the Air Force should have 3,590 combat aircraft (of them, 300 are medium bombers) and PVO Aviation will have 1,560 aircraft. The number of armed combat trainer aircraft that are part of the indicated levels is 440 for the Air Force and 60 for PVO Aviation.

[Grinyuk/Butovski] Aircraft are being removed from the inventory. And what is their future fate: destruction or are variations possible—sale to museums, organizations, and private individuals in our country and abroad?

[Malyukov] The excess number of combat aircraft over the prescribed level for our country is 1,461 aircraft, of which 733 are in the Air Force and 728 are in PVO Aviation. The Treaty has determined that the combat aircraft are being reduced through their destruction, inclusion in static displays, use as ground training facilities or targets, and reclassification of combat trainer aircraft into unarmed trainer aircraft.

In the Air Force of the 733 combat aircraft that are subject to being reduced in a 40 month period, 290 are being destroyed by cutting them into pieces, 208 combat trainer aircraft are being reclassified into unarmed trainer aircraft, 160 will be used as target aircraft, 15 as ground training facilities, 24 MiG-25U aircraft are being submitted only for certification, and 36 aircraft are being used in static displays.

Static displays also precisely assume demonstration of aircraft in museums and other training locations. Right now they are studying the demand for aircraft.

Of course, I have not cited all of the numbers. But I want to add that there may be other proposals on the forms of utilization of aircraft that have been removed from the inventory.

[Grinyuk/Butovski] How does the Air Force plan to increase cooperation with DOSAAF?

[Malyukov] The Air Force has carried out and is carrying out cooperation with DOSAAF in many directions. I will name only the primary directions: supplying aircraft, helicopters, special ground equipment, and documentation for them and rendering training assistance, also including cooperation in the training of reserves. Many readers of this magazine know that aircraft training centers (UATs) were established in DOSAAF in 1966 at the initiative and with the active support of the Air Force. They initially trained pilots in MiG-15 and MiG-17 aircraft and right now in L-29 aircraft with a total training term of two years. In so doing, Center graduates are enrolled in the reserve during the second year of training with the award of the military rank of junior lieutenant. At that time, first and second generation aircraft composed the inventory of Air Force air units and UATs graduates primarily met their function—Air Force Reserve. Yes and not only the Air Force Reserve. Many of them performed and are performing duty at air units.

At the present time, the situation is radically changing. Air Force reductions are occurring. Qualitatively better, different aircraft is in the inventory of combat units than the aircraft in which training is occurring at the Centers. As a result, the level of training of UATs graduates and their further activities, as a rule, that are not associated with flying work, will require us to practically train

reserve pilots over again. As a result of this, it is quite problematical to consider UATs graduates to be a reliable, trained reserve for Air Force combat units. But this does not mean that we need to close all of them as the magazine correctly criticized the Minister of Defense.

In our view, it is advisable to transfer the center of gravity in the cooperation of the Air Force and DOSAAF to initial pre-conscription training of civilian youth for service in the Air Force, especially for training at Air Force flying schools. The joint coordinated efforts of the Air Force and DOSAAF will be required to expand the network and to improve the activities of special boarding schools with initial flying training and aeroclubs. The New Minister of Defense Marshal of Aviation Yevgeniy Ivanovich Shaposhnikov, himself a fighter pilot, has rejected "closure". The UATs problem will be resolved in such a manner that our lads will be able to fly and will be involved with aviation sport. The directions of cooperation, along with what has already been cited above, can be—a joint search for new organizational structures, joint decisions and their realization, patron ties of Air Force units with DOSAAF clubs, rendering teaching and practical assistance in the selection of candidates for flying specialties, and others.

We see the primary goal of Air Force and DOSAAF cooperation in the creation of initial flying training centers and the education of young people based on aeroclubs and special schools

I am far from the thought that the identified directions of Air Force and DOSAAF cooperation have been totally exhausted. A joint search for new forms is needed.

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General Description of A-50 AWACS

92UM0809A Moscow VOYENNYYE ZNANIYA
in Russian No 8, Aug 91 p 10

[Article by Lieutenant Colonel N. Poroskov: "In the Air—KP [Command Post]"]

[Text] Passengers at joint-basing airfields where civilian aircraft and military aircraft are lined up on neighboring ramps could sometimes see an IL-76 transport aircraft, normal in appearance, if you did not consider the nine-meter mushroom antenna that was attached to aerodynamic struts over the fuselage.

Just what kind of aircraft is this? The A-50 DRLO [AWACS]—early warning aircraft—is similar to the American AWACS [Airborne Warning and Control System]. The first aircraft were born in our country a quarter of a century ago based on the TU-95 and had the designation TU-126. Since the middle 1980's, the AWACS have a new airframe and modern electronic filling. If they attempted to "drop" the previous aircraft below the target in order to illuminate it with the onboard radar from below, the new aircraft will pick a target up out of the ground clutter. Today AWACS may

serve as a flying fighter aircraft vectoring post, a radar site, and finally a command post.

The information obtained by the powerful onboard radar is reprocessed by several computers and depicted on screens with various functional designations and is then transmitted in the air to fighter aircraft or is "dumped" (a specific term for AWACS) to the ground via telecode. The information can also be transmitted via satellite.

An onboard computer provides a modern fighter aircraft with all of the data to intercept a target. The pilot of a heavy aircraft that is difficult to operate can sit, as they say, idly by. And only after the target has been detected using its gunsight, he can operate independently. AWACS will warn about a new target, a maneuver by the enemy, and calculate the intercept point with the target.

Naturally, you need the appropriate equipment to carry out these tasks. When you first enter the cargo section of the aircraft, through habit you expect to encounter the enormous empty space of a transport aircraft. And—in contrast to what was expected—you are struck by the abundance of equipment. The first "floor"—are screens for the radar tracking operators and intercept controllers with numerous instrument panels and keyboards to input information and adjust the equipment. Above—assemblies are everywhere with indicator lamps and interwoven thin transmission lines. The onboard radar, braided strands of cables, and waveguides are in the tail section.

Words of delight instinctively shot out of me, but Senior Navigator Major V. Shatokhin dampened my enthusiasm. He said, we could transform the equipment racks into miniaturized units with the required technologies and component base. Today the crew, fearing for the durability of the landing gear, is not able to completely fill the aircraft with fuel because of the heavy equipment. Hence, it has less loiter time in the air. It has an aerial refueling receptacle but it is not utilized—the aerodynamic specifications that have been changed as a result of the antenna installation prevents the tanker aircraft from lining up on the tail of the AWACS.

If we add the lack of any sort of crew rest area, restroom, the constant high-decibel hum in the passenger section, SVCh [Ultra-High Frequency] radiation, intermediate airfields without normal overnight accommodations and food to what has been enumerated, one can understand—the duty here is difficult.

But despite all of the problems and confusion, the crew is friendly, optimistic and, the main thing, works well together. I observed the businesslike coordination of the specialists when the aircraft orbited in gigantic figure-eights at an altitude of 10,000 meters over the Pacific Ocean in the area of the Komandorskiy Islands and over the Sea of Japan. The flickering screens, on which all of the ground and surface situation was depicted, illuminated the concentrated faces, the commands of Captains

A. Zhitnikov and S. Selivanov went out over the air-waves, and Flight Engineer Captain I. Galutvo rushed from equipment rack to equipment rack.

While orbiting in the designated air zone, we vectored PVO [Air Defense] fighter interceptor aircraft against shipborne cruise missiles, against groups of strategic aviation missile-carrying aircraft who were attempting to attack first coastal bases and then a task force at sea, coordinated with KPUNIA—shipborne fighter aircraft control and guidance facility, and transmitted (for the first time!) one-way [odnóstoronnaya] information to submarines. And it turned out that we were simultaneously operating for both the "blue" and the "red" forces. At that time, Major V. Shatokhin and Captain R. Badalov, who were sitting alongside me, became "enemies" for a time.

Work on the AWACS is dangerous. And not only because this is flying work. If actual combat operations occur, the AWACS will become an object of special "attention" for the opposing side because it is one of the main command and control elements.

The potential enemy understands this and is therefore tracking the AWACS's every move. NATO fighter aircraft fly around them over the Barents Sea and "two Japanese aircraft hung" behind us for some time. And, of course, RC-135 and Orion aircraft are everywhere—constantly escorting us.

For information: In 1991, American E-3A Sentry Early Warning and Control Aircraft (AWACS), operating in close contact with similar NATO aircraft, will enter into the British Air Force inventory. France will acquire six aircraft. The capabilities of the new system have been significantly expanded.

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Stealth Threat to Air Defense, Part II

92UM0838B Moscow *VESTNIK PROTIVOVOZDUSHNOY OBORONY* in Russian
No 1, Jan 92 (signed to press 10 Feb 92) pp 47-49

[Article by Lt-Gen V. Malanichenko: "Stealth Versus Air Defense*"]

[Text] Predicting a massive influx of low-observable airborne vehicles into the inventory, foreign military departments are beginning broad studies on problems of counteracting such offensive air weapons [OAW's]. Paramount attention is being given to their detection. The problem of destroying stealth aircraft concerns military experts to a lesser degree. It is believed that with reliable detection and tracking, these OAW's can be destroyed with a set probability not only by future but also existing surface-to-air missiles [SAM's]. Based on the design peculiarities of the stealth aircraft, it is planned to use in the SAM systems SAM guidance modes for attacking the target from above; to equip SAM's with heat-seeking,

passive, and active homing heads with the capability of independent search with separation and target lock-on in flight; to integrate SAM systems, portable SAM systems, and antiaircraft artillery for carrying out a combat mission; to link antiaircraft artillery systems with search-light-illuminated areas and optoelectronic reconnaissance assets; to straighten as much as possible the channels for issuing combat information from intelligence assets to weapons; to put into action for air defense cruise missiles with a combined guidance system (inertial in the initial phase and infrared in the terminal phase) and with a loitering mode with elevation in the assigned search area (Tacit Rainbow electronic warfare cruise missiles).

One way of solving the problem of detecting low-observable aircraft is to create a solid radar field over the troops and installations being covered. Of great importance here is the selection of the distance between adjacent radars. Even if the height of the lower boundary of the field is 1,000 meters, with an operating range of modern radars against stealth targets of about 20 km, the distance between the radars must be no more than 30-35 km, which is not realistic. It is quite difficult to detect low-observable targets using today's radars. Therefore, in recent years there has been an increasing interest in so-called multiposition radars, which are a system of several interacting transmitters and receivers separated in space. The simplest multiposition radar, consisting of one transmitter and one receiver, is called a bistatic radar. The effect of increasing the target's radar cross-section and, consequently, the range of these radars is created due to the fact that the directions of target illumination and receipt of the reflected signal are different. Another advantage of multiposition radars is the high undetectability of the receivers operating in the passive mode, good protection of the transmitters located beyond the range of weapons (on the ground or on airborne platforms), and the fairly high degree of protection against jamming as a result of the availability of several transceiver channels. Foreign press reported on the testing of a new VHF multiposition radar, which represents the sum total of a large number (from 25 to 100) transmitters and receivers dispersed on the terrain, making it possible to create solid radar coverage of low-altitude low-observable targets in a given area.

Multifrequency radar is being developed more and more. Its advantage is in the ability to select the sum total of frequencies coordinated with the target shape, which also provides a considerable increase in the detection range of low-observable OAW's.

The range of surveillance can be increased by elevating the radars, placing them on special airborne platforms. Overseas today they are attaching special importance to the use of "flying" radars. In this case, the target is illuminated by electromagnetic energy from above, where the radiating structural members of the aircraft are not shielded and, consequently, where the radar cross-section is the largest.

Airborne early-warning aircraft can ensure observation of the air situation to a considerable depth and provide early warning to air defense assets about the appearance of an airborne enemy. For example, E-3A aircraft ensure detection of targets with a radar cross-section of 0.1-0.3 m² at a range up to 100 km while patrolling at medium and high altitudes.

Striving to increase the detection range of low-observable OAW's, the U.S. Air Force is upgrading the radar on AWACS aircraft, improving the quality of digital processing of signals with the aid of computers. There are also plans to install a signals intelligence system on these aircraft in the first half of the 1990's. In addition, the ASTARA advanced early-warning radar aircraft is being created specially for detecting low-observable aircraft. It will use a dual-band radar with a probing-signal frequency that changes according to the shape of the target. Such technical decisions lead to a commensurability of the wavelength of the probing signal with the target size and, consequently, the resonance nature of the reflections.

The advantages of airborne radars lie not only in the greater operating range but also in their lower vulnerability, since they are less vulnerable to being hit than ground radars in the event of a surprise enemy attack. Such aircraft can be used to observe friendly aircraft during their flight to the strike targets, warn them about approaching fighters, and give commands to bypass positions of SAM sites. Finally, if necessary, radar early-warning aircraft can become mobile command posts for command and control of ground forces.

In the interests of early detection of low-observable targets, special dirigibles with long-range radars can be used. They are able to fly for a long time (10-12 hours) without refueling. The large load-carrying capacity makes it possible to accommodate radars with increased power and large antennas.

Timely insertion of airborne reconnaissance assets (particularly radar early-warning aircraft) into designated areas requires advance notification of estimates on the direction of flight of the airborne enemy. This task can be accomplished successfully by over-the-horizon [OTH] radars.

OTH radars operate in the metric waveband from approximately 10 to 100 meters. American experts regard them as one of the most important means of detecting stealth aircraft. During the course of testing OTH radars in 1988, low-observable airborne vehicles with a radar cross-section of 0.1-0.3 m² were detected at a distance of up to 2,800 km at altitudes from 150 to 7,500 meters.

The U.S. Air Force is presently developing transportable OTH radars, which could be airlifted in a short period of time to pre-prepared sites.

OTH radars operate at long ranges (from 800 to 4,000 km). They can be used to detect targets from extremely

low to the extremely high altitudes, moving surface ships, and ballistic missiles in the boost phase and upon entry into the dense layers of the atmosphere. An OTH radar monitors an area of over 1.6 million km². However, these reconnaissance assets also have their shortcomings. Due to the presence of a skip zone, they cannot detect targets at a distance of less than 800 km. They have a low accuracy of determining coordinates and insufficient resolution (distance of 1.5 to 40 km, depending on the frequency used, and azimuth from 0.25 to 1 degree).

It is planned to eliminate the first shortcoming by having radar early-warning aircraft patrol in a 800-km zone. They plan to increase the accuracy and resolution by expanding the band of the emitted signal (decreasing pulse duration).

Increasing attention is being given abroad to space reconnaissance. Space-based radars are the only means that can ensure tracking of vast territories with adjacent airspace and water areas. However, the space reconnaissance systems in the inventory are oriented on accomplishing strategic missions. The multistage centralized structure of space systems, as the combat operations in the Persian Gulf showed, do not provide the necessary timeliness of data processing and dissemination of the data to tactical commanders. Therefore, the U.S. Department of Defense wants to accomplish this task by using inexpensive small satellites launched from aircraft by expendable missile platforms. It is planned to use these small satellites in specific theaters of military operations for radar, signal, and optoelectronic reconnaissance.

Data from satellites of the reconnaissance system is to be gathered by using mobile ground assets for receiving information.

The new concept of using space supporting systems is aimed primarily at increasing the effectiveness of combat employment of tactical subunits' air defense weapons.

Parallel with the development of small satellites, the United States is conducting experiments with infrared telescopes inserted into orbit as detection means having a passive mode and high resolution. If you consider that the thermal radiation of aircraft made using stealth technology is directed towards the upper sphere, the effectiveness of using such a reconnaissance asset for small targets is obvious.

Another problem is the detection and tracking of airborne targets heading towards the strike targets over concealed routes. Ground-based air defense radars and also the above-mentioned air- and space-based reconnaissance assets are not able to accomplish this task in individual areas due to the shielding effect of the terrain, wooded areas, and various manmade structures on propagation of electromagnetic waves. One way to solve this problem is to create on individual avenues warning zones for overflight of OAW's. It is planned to set up

such zones to cover passages in the air defense system that cannot be seen by reconnaissance assets (ravines, valleys, rivers, roads, seacoasts, and so forth). The reconnaissance assets in the warning zones are radar, acoustic, laser, television, and other sensors whose operation is based on using different physical fields and phenomena.

Small transmitters and receivers of continuous-wave or pulse-emission radar signals. A "radar screen" is created by their linear disposition on the terrain and special antennas with a radiation pattern up to 10 degrees wide. When the target crosses this "screen," it is recorded on the displays of the control post.

To create the necessary height of the "screen," the sensors 100-300 meters apart from one another can be raised to an altitude of up to 4 m by using captive balloons. Lines run inside the captive cables for supplying electrical power to the equipment and for control.

The acoustic sensors, capable of registering the noise of a low-flying aircraft or cruise missile at a range of 1 to 3 km, are made in the form of highly sensitive sound-signal linear receivers. They are positioned on the terrain in checkerboard fashion up to 1,000 apart. A group of 25 acoustic sensors is connected up to the control post through an intermediate switchboard console.

The use of laser sensors is based on the formation of a "screen" by laser beams; when the target crosses this "screen," it is registered by the corresponding displays. Thus, in one of the systems, the "screen" consists of invisible beams going from the laser emitters in the direction of photo-detectors. The beams can be deflected by using special reflectors, which makes it possible to change the direction of the "screen" based on the nature of the terrain in the sector covered. All the laser beams used in the system are modulated by a specific code, which makes it possible to determine on the control post display which of the beams was crossed.

Closed television systems are the terminal means for detecting stealth objects in warning zones created based on radar, acoustic, or laser sensors. They begin operating only on receipt of an alarm signal from control posts of other warning systems. Today, they are beginning to use in such systems television cameras operating at low illumination levels and at night, which is particularly important when monitoring airspace observing blackout measures.

Foreign military experts consider passive detection and position finding complexes among the most important means of early detection of stealth aircraft. In certain conditions, these systems, by registering the radiation of onboard electronic equipment, may be the only source of information about an airborne enemy. What is more, the availability of signals intelligence in the air defense system will definitely influence the operating tactics of strike aircraft forced to fly in radio silence, which also means flying at safe altitudes. In turn, increasing the

range of altitudes of OAW's will increase the detection range for other reconnaissance assets in the air defense system.

Finally, foreign military experts link the success of solving the problem of combating stealth aircraft with the introduction of automation in all levels of air defense command and control. Automated control systems ensure centralized processing of data being received from various airborne target reconnaissance assets and warning systems, identification of nationality, issuance of information to the appropriate weapon systems, and working up of recommendations for efficient command and control with the use of surface-to-air missiles.

In assessing the problems of combating stealth aircraft as a whole, western observers note that intensive theoretical and experimental work is being done in all possible directions. Individual results are already being implemented; others may be implemented in the near future. It is also noted that comprehensive use in air defense systems of reconnaissance and forces and assets and weapons that are different in configuration and functioning principles ensures a high effectiveness of combating low-observable airborne targets.

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CIS: NAVAL FORCES

Rear Adm Belyshev: Moving Fleet Into Market Economy

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pp 3-10

[Article by Rear Admiral L. Belyshev, candidate of technical sciences: "Paths of Navy Entry Into a Market Economy"]

[Text] Today we hear a great deal about the market but still have a vague impression of its mechanisms. Nevertheless, it is quite clear to us that the market will not accept administrative methods of management. An effect can come from it only with competition of manufacturers and their products and with a clear concept of price formation.

The Armed Forces also are developing their own concept of entry into market relationships as an adaptation to them for the purpose of forming a new system of Army and Navy support adapted to the market economy and providing support for sufficient national defense capability. Obviously, much will be clarified here in the course of practical work with industrial enterprises and with state and republic agencies.

This transition will be carried out under conditions where the leadership of this country and of the United States officially declared that they must not remain political and probable military enemies. But the opinion

being intensively spread by some politicians, scientists and public figures that a military threat in general no longer exists is erroneous. Alas, a military threat will exist as long as there are nuclear arsenals and powerful groupings of armed forces.

The United States preserves a stable endeavor to transfer to the ocean a powerful attack potential intended for destroying ground targets.

Under these conditions the conclusion naturally is drawn about the need for preserving Armed Forces common to the Commonwealth of Independent States [CIS] that are multinational, regular, manned on a mixed volunteer-contract basis, meet demands of reasonable and reliable sufficiency for defense, and are capable of preventing an external diktat of force and repelling aggression from any direction under the most unfavorable situation conditions. That conclusion also found support in results of a survey published at the last Russian Congress of People's Deputies, according to which around 90 percent of those surveyed favored the need for preserving a unified Army in our country. At the same time, political changes in our state and the real economic situation insistently demand that a profound military reform be carried out. Its concept, worked out in the Ministry of Defense, was submitted to the Russian Supreme Soviet for consideration in the same package with drafts of other laws on defense. At the present time a specially formed committee (headed by General of the Army K. I. Kobets) is studying all aspects of the concept, and we expect final decisions will be made very soon.

Any reform needs scientific substantiation. As applied to the defense sphere, this concerns military doctrine above all. Based on an analysis of events of recent times—fundamental transformations in Eastern Europe, disintegration of the Warsaw Pact Organization, withdrawal of forces from the territory of our former European allies, the republics' proclamation of their independence, as well as the complex political and economic problems that face them—some of its provisions require adjustment.

As recently noted in assessments by the country's Armed Forces General Staff, in implementing our military reform and working out a modern military doctrine, it is necessary to answer the following questions: What are our nationwide and national interests in the defense area? In our time and in the foreseeable future, who can be a potential enemy of the Commonwealth and who can be an ally in possible conflicts, including in international operations with the use of military force sanctioned by the world community? What are the military policy goals and what is the spectrum of basic missions to be accomplished within its framework? What are the ways and means of accomplishing these missions?

Answers to these questions must be incorporated in law.

In the new doctrine it is proposed to reflect aims based on prospects of development and functioning of the country's defense-industrial complex as well as use of physical and human resources in defense interests. The

doctrine also proposes to fix the optimum correlation of capacities of the national economy with the quantitative and qualitative state of the Armed Forces and to define limits of defense sufficiency.

Creating a mechanism for ensuring national security is the principal content of radical military reform. Reform will take in all spheres of defense organizational development, and above all a radical transformation of the Armed Forces and a qualitative upgrading of all their components with a simultaneous reduction in effective combat strength.

It is proposed that the Armed Forces structurally will include only those components which directly form a system of defense capability—branches and combat arms financed from the state budget. Other "noncombat" paramilitary elements—Civil Defense, military commissariats, military sports and defense societies, Internal Security Forces, Border Guard Troops, Construction Troops and Railroad Troops—must be removed from the Armed Forces. This will become one of the basic directions for reducing the Armed Forces and bringing them to a numerical strength not exceeding three million persons.

The reform proposes to resolve urgent problems under new political, economic and social conditions with a simultaneous upgrading of the Armed Forces in all directions, above all in reducing the military-technical lag behind NATO armies in such kinds of arms as long-range precision missiles with conventional warheads and automated command and control and weapon control systems, as well as in concentrating efforts on seeking new areas in military engineering and prospective technologies as the only way to prevent such a lag.

In what way can this be achieved? Above all through economy. Thus, expenditures for procuring arms and equipment will be reduced during the reform. The proportion of expenditures for social needs will increase within the structure of appropriations use, and the number and product list of kinds of arms and military equipment being ordered will be reduced. An endeavor to retain the most important RDT&E programs is discernible here.

The following are established as principal directions of military-technical policy:

Qualitative upgrading of arms and military equipment based on realization of the latest S&T achievements and foremost technologies and use of results of basic and exploratory research;

A significant increase in the level of servicemen's professionalism;

Weapons and combat equipment of new generations placed in operation and advance S&T work done for these purposes.

The transition to market relationships requires clarification of weapon programs adapted to new economic conditions and a revision of the entire system of arms orders and procurement. It will be required that additional steps be taken to prevent and preclude disproportions in development rates of their different kinds and classes. In addition, RDT&E in defense interests must have a tendency to obtain universal results, i.e., the possibility of their use in technology of civilian products. This will permit a sharp increase in the degree of economy in carrying out such projects. An accumulation of a "state reserve of defense technologies" also is provided for here, where RDT&E will conclude with the test of arms and military equipment mock-ups or prototypes or with working out a detail design of a sophisticated weapon system without a transition to industrial series production, but with a high degree of potential readiness therefor.

Implementation of that policy has the purpose of substantially increasing the quality of arms and military equipment being delivered to the Army and Navy, reducing their product list, reorganizing the system of orders, and creating an effective mechanism permitting exclusion of extensive development paths and ensuring conformity of technical outfitting to actual requirements.

The draft military reform proposes to introduce a mixed system of Armed Forces manpower acquisition as of January 1992, combining the call-up of citizens for military service with contract service. Special attention will be given to training officers, who will have the main burden of working with people in units and aboard ships and training them as professionals. The officers must have universal military knowledge. Therefore their striving to obtain an additional military specialty or academic degree or to publish a scientific work must be given economic, not symbolic, incentive. It is proposed that an index of the modern officer's intellectual capacities should be added without fail to the criteria of his official evaluation.

Strategy of perestroyka of the Armed Forces economic support mechanism. The principal criteria for choice of actions here are the following:

Maintaining the country's defense capability at a level of reasonable sufficiency in the period of transition to a market economy and subsequently;

Optimization of defense expenditures;

Creation of conditions for accelerated S&T progress in the defense area;

Provision of normal living conditions for servicemen and their families as well as for Ministry of Defense employees.

The program for transition to the market proposes the following:

1. Urgent steps to be taken for unconditional provision of everything necessary to the Armed Forces. These steps

are spelled out by special decisions of the Council of Heads of States Parties to the CIS.

In the first phase of the transition period it is proposed to continue the effect of the complete [skvoznoy] state order on all products for the Armed Forces and retain administrative regulation of processes of all kinds of their support. In this phase there is a revision of stockpiles of arms and military equipment, military-technical property and other supplies. Their surpluses as well as their obsolete models will be sold on the domestic market and partially on the foreign market.

In 1990 the USSR Ministry of Defense transferred property and supplies worth R512 million to the national economy. A large number of fairs and auctions were held to sell military-technical property. The state property fund forecast evaluates the resource potential of Navy military-technical equipment subject to recycling as follows by years (1991 prices): R25 billion as of 1 January 1991, R35 billion as of 1 January 1996, and R60 billion as of 1 January 2000.

It is intended here that the following will find use in the national economy: floating craft; command and control and navigation systems and local computer networks; communications equipment; generators and other electrical equipment; material-handling equipment; pipelines and pump units; and automatic signaling, fire extinguishing, temperature-humidity condition, heating, ventilation, air conditioning, lighting and other systems. All this is technical equipment, but in addition there are raw materials obtained in recycling arms and military equipment: ferrous and nonferrous metals, wood, textiles, POL, and powders and explosives, from which nitrogen fertilizers can be obtained, for example. Recently a requisition was submitted for using ballistic missiles for growing crystals and obtaining medical preparations in space. So opportunities for application are inexhaustible and await realization.

Considering that very soon we will have to assimilate an enormous resource potential formed in connection with reduction of the Army and Navy and removal of a considerable quantity of military-technical property from operation, the establishment of a large-capacity **commercial center** in the Armed Forces is proposed. It will be given responsibility for centralized management of the process of transferring, selling and recycling all property freed up.

2. A scientific study of problems of Armed Forces' functioning under market economy conditions and organization of military specialist training in the sphere of economics and market relationships is envisaged. Such a study already is being made by a specially established Armed Forces economic commission involving officials of Commonwealth states and will be completed very soon. Curricula of higher military educational institutions are being revised.

3. It is proposed to upgrade the system for planning the provision of arms and military equipment to the Armed Forces, developing military production and deliveries of supplies to the troops, regulating the activity of defense complex enterprises, exporting arms and military equipment, and elaborating questions of social protection of servicemen, their families, and Ministry of Defense employees.

These questions are being studied in detail by the State Commission on Military Reform. A unified agency headed by the Committee for Orders of Arms, Military Equipment and RDT&E will work on the planning system. Unifying steps will be carried out in the existing structure, intermediate management levels will be eliminated, and immediate executing entities thereby will be brought closer to financial credit managers. Agencies which order arms and military equipment must remain within branches of the Armed Forces, including the Navy. This question is being thoroughly studied.

4. It is proposed to establish an Armed Forces economic service. This will be a new analytical element directly connected with military representatives in industry.

5. It is envisaged concentrating all budget appropriations for arms and military equipment procurements, conduct of RDT&E, and development of production and social spheres of the Armed Forces under their immediate jurisdiction. That step is dictated by the need to step up control by the client over expenditure of funds being released for defense. A transition will be made to an agreement (contractual) system of orders for RDT&E, arms and military equipment and other necessary supplies. The initial stages of arms and military equipment development will be carried out here on a competitive basis as a rule, with the client paying for work of the competition winner, as is done in the majority of countries.

6. The use of capabilities of Armed Forces commercial activity in Armed Forces organizations is proposed for purposes of partially replacing state defense expenditures, developing one's own production and improving everyday social conditions. It is planned to expand capabilities for self-financing of military enterprises, military units and establishments by permitting the use of leasing; creation of joint-stock companies, small enterprises and joint ventures under the direction of main and central directorates; manufacture of products to be marketed; and performance of jobs and services on a contractual basis but not to the detriment of Armed Forces combat readiness and performance of principal functions.

Procedure for allocation and use of financial and other resources for defense needs. The State Armed Forces Development Program will be the basis for planning financial and other resources for defense. In particular, long-range and annual military shipbuilding plans will be formed based on this program. We are proceeding from the assumption that appropriations allocated for defense needs must ensure full satisfaction of Armed Forces requirements within limits of defense sufficiency. There

will be an annual updating of the amounts of appropriations with consideration of quantitative and qualitative changes occurring in the Armed Forces as well as of the inflation level.

It is proposed that based on the concept of common security the Council of Heads of States Parties to the CIS determines the list of missions of unified Armed Forces, after which this list is translated into a set of specific missions for branches of the Armed Forces and the resources and appropriations required for their accomplishment are calculated. The following drafts are prepared on this basis: Armed Forces development plan, mobilization plan, and state ten-year program for arms and military equipment development, which includes basic directions for arms and military equipment development for a ten-year period and plans for series deliveries as well as plans for basic and exploratory work and RDT&E. Subsequently these plans and programs are consolidated in a unified document, the State Armed Forces Development Program.

It is presumed that this program and budget appropriations for its realization will be approved by supreme authorities of the CIS. If the requested appropriations are deemed excessive, the list of Armed Forces missions is reduced or levels of their accomplishment are lowered, after which the resources necessary for this are clarified.

There also can be another approach to determining the requirement for budget funds for defense, according to which the product list and quantity of basic types of arms (such as makeup of ships, aircraft, tanks and so on) are determined in each branch of the Armed Forces based on assigned missions of ensuring national defense. This product list is approved by the country's legislative body, which should introduce precision to forming the defense budget and serve as the basis for drawing up programs for creating arms and replacing their models which have become obsolete and have served their period of service. That procedure is practiced in the United States. Under our present conditions the inadvisability of creating certain kinds of ships and naval weapons is pointed out to us more and more often from the pages of the press and from rostrums of various forums, people advance their own versions of the weapons mix for accomplishing missions facing the Navy, and they even attempt to adjust these missions. Such an unprofessional approach to deciding defense questions, frequently clothed in a scathing form, has a negative influence on public opinion and completely distorts our military-technical policy.

A reorganization of the system of entities which manage economic support of defense at all levels—statewide, interdepartmental, and Armed Forces—is inevitable in the transition to a market economy. The system of entities managing economic support of defense at the interstate and interdepartmental level will be determined by the governments of CIS member states. The

establishment of a special defense structure which plans the placement, support, and monitoring of fulfillment of defense orders is envisaged. An economic service is established in the Armed Forces for performing new, nontraditional tasks. It is to handle a complex of economic problems both within the Army and Navy as well as in interrelationships with industry. This service's functions now are being worked out and clarified, and it is envisaged that a system of economic training for officers and employees of the Soviet Army and Navy will be set up for successful realization of those functions.

Armed Forces' interrelationships with enterprises, organizations and establishments of the national economy in development and production of arms and military equipment. As already stated, the state order regulated by the Russian Ministry of Economics and CIS governments will remain the basis of such interrelationships. Interrelationships with other enterprises, organizations and establishments (joint-stock, small, leased and so on) will be built on an agreement or contractual basis with assurance of economic incentive for priority of fulfilling defense orders. As a rule, contract relations with this group of nonstate enterprises must be established on a contractor basis by the head executing entity for defense products, the state enterprise.

In the transition period the state order is planned to be preserved for all military products, military shipments and basic supplies for supporting combat readiness and vital activities of Army and Navy forces with priority state provision of military-technical resources and guaranteed financing. It is proposed that in this case the state order definitely will be voluntary and advantageous for manufacturers. It is proposed that incentives will include preferential taxation, explicitness of the volume of orders and stability of their realization, state order on set-making equipment and materials and so on. Specific incentive factors now are being worked out.

It is proposed that structures supporting the planning, placement and monitoring of deliveries based on Armed Forces orders be reorganized in Commonwealth countries in the makeup of ministries and departments. In the shipbuilding sector these entities include the Department of Shipbuilding in the RSFSR Ministry of Industry and the Russian Sudprom Shipbuilding Industry Corporation (which consolidates interests of that sector's enterprises in Russia), both of which were established in accordance with an RSFSR Council of Ministers decree of 2 November 1991.

As market relationships expand, contracts for deliveries of basic systems and models of arms and military equipment and of certain scarce supplies for supporting Army and Navy vital activities as well as contracts for military shipments will remain part of the state order. Other products will be ordered based on direct agreements (contracts) with suppliers on a competitive basis.

To improve the organization of military-technical supply and foreign economic activity of the Armed Forces, the

previously existing Directorate of Physical Funds is reorganized as the Directorate of Physical Resources and Foreign Economic Activity. It is being granted the right to perform export-import operations in the interests of Armed Forces consumers, thus ensuring coordination of work in the Armed Forces for export and import of military-technical resources, as well as the right to carry out foreign economic activity on a commercial basis for outside organizations. This directorate together with other ministries and departments also is assigned the resolution of property, financial and economic matters connected with the sale of physical assets of Soviet forces being withdrawn from abroad as well as with the establishment of joint ventures and other forms of joint economic activity.

On price formation. At the present time the system of price formation for the country as a whole, including for shipbuilding products, is in a transition phase, i.e., it is in a state of gradual approach to requirements and conditions of a market economy. This is being done above all by gradually rejecting centralized establishment of prices and transferring the functions of forming contractual prices directly to manufacturing enterprises and clients.

At the present time the Russian Ministry of Industry Committee on Prices has prepared a temporary statute on the procedure for forming contractual wholesale prices on series-produced defense products. It envisages a uniform approach for all enterprises regardless of subordination, and forms of ownership and jurisdiction in forming contractual wholesale prices on series-produced products for defense purposes based on fundamental technical, production and economic standards and norms which consider specific production features. Those prices are worked out by the enterprises based on production expenditures and standardized profits and are coordinated with the client.

In calculating the production cost of products, economically substantiated expenditures for their manufacture are taken into account based on progressive norms for consumption of material, labor and financial resources. Consideration also should be given to union and republic legislative measures in force which influence the makeup of expenditures included in the production cost of products. The cost of consumed materials, raw materials, energy and set-making articles will be determined at a level coordinated with suppliers for 1992. Profit in contractual wholesale prices is taken based on the maximum norm of profitability in an amount up to 25 percent of full production cost.

Contractual wholesale prices worked out in this manner are established for the effective period of the contract, but for no less than one year. The duration of the effect of a price on one-time and individual orders is determined by the period of fulfillment of the order. Price changes are allowed in case new legislative measures are adopted in the effective contract period which affect a change in the makeup of expenditures. Considering the

simultaneity of developing contractual prices on raw materials, materials, set-making articles and end products, the cost of the latter can be updated by agreement of the parties in the first quarter of 1992.

Differences arising in agreeing on prices are considered by the Committee on Prices (whose decision is final) based on a submission from industrial management entities, with the appending of the client's reasoned objections.

In cases where maximum profitability level based on results of economic activity for the half-year is exceeded in the contractual wholesale price, manufacturing enterprises independently lower the contractual wholesale price by the amount of this excess. Preserving prices with inflated profitability is a violation of existing legislation, and in this case the inflated amount is transferred to the budget and a fine is imposed in accordance with existing legislation.

Contractual wholesale prices for the most important kinds of arms and military equipment are subject to registration in the Committee on Prices. Navy arms and military equipment subject to registration are ships and vessels, aircraft and helicopters, spacecraft, missiles and launchers, guns and small arms, radar and radionavigation systems, and communications systems and complexes.

Armed Forces ordering entities and military missions at industrial enterprises will exercise immediate supervision over the dynamics of prices on military products.

The right of ownership of S&T products produced from Armed Forces funds under state order will belong to the client, including the right of selling the S&T products in the country or abroad. A portion of funds from selling S&T products must be used by the client to develop an experimental and data base of scientific research, for financing new developments, as well as for economic incentives for scientific cadres participating in this work.

Mobilization preparation of the national economy under market conditions. To be worked out are draft legislative measures on the procedure for financing the full complex of work on mobilization preparation of the national economy, and supplements to already adopted laws on enterprises and on cooperation with regard to specifying the obligations and responsibility of officials and labor collectives on preparation for work in wartime.

In the market transition phase it will be necessary to take steps to preserve already existing stockpiles and revise the structure of supplies being included in emergency supplies; to upgrade the organization of work to monitor and maintain the quality of their storage; as well as to seek new methods for lengthy storage of what is included in emergency supplies.

Under market economy conditions the problem of financing expenditures of enterprises, establishments

and organizations connected with upkeep of mobilization capacities and the training and retraining of reservists and predraft-age youth for military service is to be resolved. Such standards now are being worked out.

On realization of the shipbuilding program and plans for creating Navy arms and military equipment under present conditions. In organizing work along these directions, we are proceeding from the following determining provisions:

1. Principle of minimum defense sufficiency, which as applied to our conditions is realized in demands for maintaining naval forces at a level ensuring guaranteed performance of assigned missions and combat stability of our forces with their minimal makeup and constant readiness to disrupt aggression under any conditions of the initiation of war.
2. Principle of balanced development of naval weapons according to goals, missions, and employment areas with consideration of support to their basing and operation.
3. Principle of economy of resources allocated for creating new ships and arms, accumulating requisite stores, and keeping up arms and military equipment.

New ships will be constructed and arms and military equipment will be created in the upcoming period under a reduced program with consideration of the factors indicated below.

Considering the signing in June 1991 of the Treaty Between the USSR and United States on a Reduction and Limitation of Strategic Offensive Arms, nuclear powered submarines with ballistic missiles basically will see development only of qualitative parameters up to the year 2000. With ratification of that Treaty, a large portion of these ships of earlier construction will be decommissioned over a seven-year period. The Soviet initiative for reducing the number of warheads from 6,000 to 5,000 by the end of this period also will exert its influence on this process.

The distribution of allocated resources for priority development of those weapons which will best accomplish missions assigned to the Navy will be optimized in creating new ships of other types. Construction of air-capable cruisers is the priority direction in development of surface combatants. That trend is seen in the development of fleets of all major world states and is dictated by the fact that under conditions of a defensive doctrine, air-capable ships with a full-fledged fleet of deck-based fighters accomplish the mission of covering fleet forces much more effectively than do other forces.

Further universalization by missions (meaning ASW, air defense, ABM defense), a reduction in the aggregate of specific-task support equipment, a buildup of striking power, and an increase in defensive capabilities is envisaged in developing other types of surface combatants.

Thus in the near term, development of the Navy's ship makeup will follow the path of its qualitative upgrading

with an overall slowing in construction rates of new modern submarines and surface combatants as well as elimination of obsolete ships from the Navy order of battle.

Realizing these plans and keeping the Navy in constant combat readiness demands corresponding financial assets, technically prepared production capacities and technological processes of industry, and scientific-technical support on the part of basic and sectorial science. An analysis shows that reductions made in appropriations in recent years for development and upkeep of fleet weapons reached an extreme minimum level from the standpoint of ensuring performance of missions assigned to the Navy and from the standpoint of the degree of military threat and assurance of strategic parity, as was also confirmed in a recent speech by CinC CIS Armed Forces Marshal of Aviation Ye. I. Shaposhnikov.

The question arises: In what ways is it possible to ensure the planned development of Navy ships, arms and military equipment with the crisis state of the country's economy, with the reduction in planning, labor and production disciplines, with conversion of a number of defense industrial enterprises, with disruption of cooperative ties (including those connected with departure of a number of republics from the Union), with the disorder in state finances, with the decrease of the budget for defense needs, and with initial manifestations of market relationships?

In our view, there is one way—making a decisive transition to the market, mastering its mechanism, working out market relationships, and incorporating them legislatively.

As forced measures under these conditions, it is necessary to reject a number of programs for arms and military equipment development and procurement and concentrate allocated appropriations on a minimum product list of new developments supporting above all the construction of new ships and the operational reliability and survivability of ships, arms and military equipment.

Processes occurring in the Armed Forces and in the Army and Navy today reflect the general political, economic and social situation in the country. Formation of market relationships and adaptation to the market is occurring far from painlessly. The principal difficulty is the backwardness in development of new legal rules governing Armed Forces activity under market conditions. Among immediate tasks, we have to expand the legal base of economic activity of ordering entities, commanders, and officers in charge under market conditions and fundamentally revise many guidance documents constraining their initiative.

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Rear Adm Kovalchuk on Requirements of Cadet Training

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[Interview with Rear Admiral Aleksandr Sergeyevich Kovalchuk, chief of Higher Naval School imeni M. V. Frunze, by Captain 1st Rank M. Golovko, occasion, date and place not specified: "Naval Educational Institutions: Readiness for Changes"]

[Text]

[Golovko] Aleksandr Sergeyevich, the oldest military educational institution of our country, which you head, celebrated its 291st birthday. The school's glorious history is widely known in the Navy. Dropping the historical aspect of the conversation, I would like to shift right away to real problems and how you propose to solve them.

[Kovalchuk] Unquestionably that which is happening around us cannot help but be reflected on the situation in the school. And the prestige of military service is dropping in the country! From 1940 through 1959 we had a competition of 10-12 or even 14 persons per slot. And of course it was possible to select the most intelligent lads from a little over 3,000!

I entered this school in 1955. One out of 12 was accepted—the gold medal with which I finished school helped. Well, the school commandant personally chatted with each of us who came through the competition and determined (more precisely, recommended) the faculty. But how he recommended it! I wanted to be a navigator, but I heard: "No, you need to be a gunner. You have abilities specifically for this." He did not order me, he persuaded me!

Our school commandants of that time were wise people who had gone through the war. Of course, they studied all our papers and character references. But most important, they possessed not only combat experience, but also enormous human experience and the ability to understand people. Their opinion meant a very great deal for us cadets; we trusted them.

And how am I forced to arrange my work now? Administrative concerns "eat up" the lion's share of the time. Instead of professional and psychological selection we are concerned with manning the faculties somehow at least in order to somehow reduce the number of cadets who drop out in the very process of training.

[Golovko] And do many leave school?

[Kovalchuk] Most often these are lads from the so-called "special recruitment." We are obligated to accept a certain percentage of cadets from Central Asia and the Transcaucasus, but they have appreciably poorer school training. They agree to enter naval schools under the pressure of persuasions of associates of military commissariats or for some other reasons, and they do. Later,

sometimes already in the second course, many show up who submit a request to be dismissed.

And in fact it is very difficult for these lads to become accustomed to naval life, which, to put it mildly, is not too easy and quite uncustomary for them. For the majority of them see the sea for the first time in shipboard practice! Then the very first storm...

But I am also troubled by the situation with "experienced navymen"—Nakhimov cadets. We take them without competition. Suddenly two years later such a "hero" reports to me and declares he erred in choice of a profession! The fact is, he already has worn the naval uniform for four years: he was dying to get into the Nakhimov school, went through the 9th and 10th grades there and knew from more than hearsay what awaited him in the future, and then...

And many Nakhimov cadets study worse than they can, worse than they should, for basic training in the Nakhimov school—we will not dodge—is better than in the majority of schools. But lads from rural areas are more determined, more composed, more purposeful—it is very likely that if not in the first, then already in the second course as a rule they are ahead of many Nakhimov cadets both in grades and in discipline and, what is most vexing, in a craving for knowledge and culture.

[Golovko] Perhaps not only individual cadets' personal negative qualities but also our general organizational and educational flaws are manifested in this. Is it mandatory to force Nakhimov cadets to enter naval or military schools? Is it necessary to accept them all in school without competition?

In addition, for boys of this age the personality and example of commanders, educators and instructors is of enormous importance. It seems to me that there are many difficulties in selecting officers, for example, for positions as company commanders, especially after the recent reduction in strength levels and authorized categories.

[Kovalchuk] A most difficult question! Now there is no prospect for career growth in school for the company commander, who is the immediate educator of these boys (they mature by the 3rd or 4th course). But the fact is, it depends specifically on him whether or not cadets will receive the first full-fledged experience and the necessary example of what an officer-organizer should be like. It is possible to give 200 lectures and spend hundreds of training hours, but if there is no real commander nearby, if a cadet does not see that his superior is able both to give orders and to delve into his problems, is capable of being not only strict and demanding, but also attentive and solicitous, there will be no results! "Degree" instructors—doctor, professor, candidate of sciences—will give fundamental knowledge and will teach how to attack a submarine and determine the probability of her detection and destruction—everything you like! Only not the example in leading a subunit or in attitude toward subordinates as well as superiors!

Usually a captain-lieutenant comes to the position of company commander. In a year or two he is promoted to captain 3rd rank, and that's it! There is no more advancement in position or rank for him in school. For the first five years he still has enough fleet experience, energy and desire to work with a full load and bring his company to graduation from school. And further? In 9 out of 10 cases a slump follows; it is well if it is not too abrupt.

And a person cannot bring himself to accuse an officer of negligence! Because it is one thing to head up some kind of permanent formation and another to command a company of cadets. These young shoots are better read and informed than you and I, saturated with everything possible and especially with everything they should not be! In order to be an authority for them and not simply a formal superior, it is necessary to "shovel" day and night—not only be occupied with the company, but also grow together with them in the most varied areas of knowledge, not miss a new book, play or film. Working under those conditions without clear, specific prospects is very difficult...

[Golovko] Do you see some kind of solution to the existing situation?

[Kovalchuk] I can propose sending an officer who has given a good account of himself in the position of company commander to a higher position. But where? To the fleet?

Do not forget that five years have gone by, and what is needed there is an officer who constantly improves his knowledge and professionalism. If he has not been on the bridge or worked with equipment for two or three years, skills and experience are lost.

This means retraining is necessary. But how? Where? What position to retrain for? It would become a bit easier were an opportunity to appear for one of the company commanders (the best one!) in the faculty to be promoted to captain 2nd rank.

[Golovko] But is it realistic for a company commander to shift to instructing?

[Kovalchuk] Essentially no. This too is a special path requiring certain abilities. And not everything is simple with instructor personnel.

A senior instructor has an authorized category of captain 2nd rank. At least 5-6 years go for his training, development and acquisition of knowledge. This means I should recommend for discharge to the reserve a 45-year-old officer who has just begun to work at full force. And I also cannot (for now) use him as a civilian specialist in the previous specialty—the positions are officer positions.

[Golovko] Perhaps the solution lies in giving the school commandant the right to petition to extend instructors' term of service by 3-5 and in some cases 7 years?

[Kovalchuk] Not the commandant! The school academic council! An individual selection is needed here. In addition to established criteria such as the degree of candidate or doctor of sciences, it is necessary to take into account an instructor's capabilities, talent, and ability to find contact with cadets. These qualities are given to far from everyone, and it is difficult to somehow strictly define them formally.

It happens where there is great return from an officer, cadets love his lectures and he knows the subject thoroughly, but he did not work on a candidate's dissertation in time and seemingly there are no grounds to extend service. But in discharging him to the reserve I am essentially acting to the detriment of the cause. And I am leaving another officer with a candidate's degree—a good scientist, but without the slightest inclination for instructor work—in service.

[Golovko] That is to say, it is necessary to have something like a class rating for instructors? And a master or 1st class specialist receives the right for an extension of his period of service?

[Kovalchuk] Possibly. I picture this as follows. The school council examines an instructor's activity from the most diverse aspects and if over two-thirds of council members vote in favor, it petitions the school commandant to extend periods of service. For we have a great need for good, experienced instructors!

A new series of problems now has arisen both for cadets and for their mentors. This is connected with the fact that the fundamental renewal and replacement and the increasing complexity of shipboard equipment has considerably accelerated over the last 10-15 years. And school laboratories are lagging more and more behind the Navy's real outfitting.

We need a high-capacity, computerized simulator facility and people who are able to use it effectively. It is impossible to teach on our fingers today using our paper cards with International Rules of the Road lights, drawings, questions, narrative problems and so on. We can and must seek opportunities right now to purchase an English navigation simulator—a training classroom for 20 persons where the instructor can simulate any situation at sea using electronics and computers. But its cost is 700,000 foreign-currency rubles! No one will even talk to me about such an amount. We ourselves do not make such equipment for now.

And the school needs simulators not just in navigation! And in order to genuinely intensify the training process, the several dozen hours of work with a personal computer which we can give a cadet for now is not enough.

[Golovko] But the country really does not have currency!

[Kovalchuk] Excuse me, but the miser pays twice! Economizing on the school most often ends up in enormously greater losses: equipment breakdowns, accidents, emergency incidents and other unpleasantness. For a lack of

professionalism and insufficient training of officers, warrant officers and petty officers always turns out to be one of the direct or indirect reasons for the majority of our naval troubles. And what financial loss is produced by the lengthy, difficult development of a poorly trained graduate and his entry into a position? And how much does it cost for a lieutenant to retrain and master new armament and combat equipment which he did not study in school? Figure it out.

In addition, funds are regularly allocated for new equipment, and it goes to the ships. This means it is necessary to require manufacturers also to develop a simulator for it in parallel with each system. That is just what is done throughout the world, only we "economize."

Do you remember the two ship guns by the school colors in the lobby? They have been there since 1867! Rifled! As soon as the Crimean War ended and it became clear that smoothbore guns were disappearing into the past, two of the latest guns were sent to the school. First to the naval school and only then to ships. And graduates were well prepared to use the real, "living" equipment, and not obsolete museum models.

Officers who went through the Crimean War immediately arrived to teach cadets and midshipmen. By the way, returning to the conversation about the company commander, I wish to note that in those years the status of course commander was equated to executive officer of a battleship or cruiser. He himself selected instructors and he himself put to sea and taught according to the principle of "Do as I do." Professionals of a high class were assigned to this position, and properly so, for today's cadet is the future of the Navy! I do not love "high style," but it can be said in no other way...

Then, following the Crimean War, the number of cadets in the school was reduced and the period of training was increased. The quality of training graduates succeeded in being elevated because of this in particular.

[Golovko] The changes which occurred in the school in the middle of the last century were part of the general military reform in the country. And now we are faced with serious transformations in the area of military organizational development. Strictly speaking, they already have begun. Are you preparing for them?

[Kovalchuk] Unquestionably. But here too I see a number of problems. I will mention one. Judging from everything, we inevitably will arrive at a contract system of service for officers, warrant officers and extended-term personnel. Consequently, it is necessary to think out in advance all possible options and features of concluding and rescinding a contract. It is assumed that a cadet will conclude a contract only after the second course, i.e., as if after two years of first-term service. Formally everything is proper, but whom will the school prepare in two years? A future officer or a person who will return to civilian life with pleasure, having avoided military service directly in units or aboard ships (for the school in St. Petersburg still is not a submarine or a remote post in the

Arctic)? Will a cadet have serious motivations for concluding a contract? For now there are more questions here than answers.

[Golovko] Perhaps a more flexible system is necessary? For example, after taking exams and enrolling in the school, to conclude a contract with a cadet under which, if he expresses a lack of desire to continue study before transfer to the second course, he will be obligated to serve two years of first-term service in the Navy. And after transfer to the second course another contract under which the cadet obligates himself to serve two years in warrant officer positions in case he decides to break off training after the second course. Possibly this will require appropriate restructuring of curricula as well.

[Kovalchuk] There is a sensible kernel in that, but I am troubled now by the fact that many sensible suggestions remain for now only suggestions. And for the umpteenth time after passing a law and beginning military reform, we will correct, finish thinking about, and revise something after the fact. This is always more costly and more painful than the option under which various suggestions are analyzed and checked in a timely manner and are implemented without delay if there is a positive evaluation.

The situation in the country is changing very swiftly and it is necessary for us, the naval educational institutions in particular and the Armed Forces as a whole, to be ready to react promptly and adequately to changes which are occurring. In my view there are no ready-made recipes suitable for all instances of life. Each region of the country has its own special situation and specifics and it is not always advisable to await instructions from Moscow for every occasion. A certain independence is needed.

[Golovko] Our journal already has written about the proposal to increase the number of Nakhimov schools. Officers of your school expressed many interesting thoughts to me on this score. Why only Nakhimov schools? And if we establish naval lyceums or colleges under certain naval schools without students being in a barracks situation? Each of them would have a certain specialization: navigation, electronics, electrical engineering, and so on. Even if not all graduates become cadets and then naval officers, they still will be considerably better prepared for service in the Army and Navy. And a high level of training of school instructors also will be of no small importance. What do you think on this score?

[Kovalchuk] I am sure that life itself soon will force us to change a great deal in the system of military service, and there has to be a constant search for fresh ideas and an analysis of different suggestions and options. Today we can in no way mark time. No one will decide for us the problems that are arising, and there will be even more of them.

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Safety Factors in Submarine Operations

92UM0777D Moscow MORSKOY SBORNIK
in Russian No 1, Jan 92 (signed to press 28 Jan 92)
pp 35-39

[Article by Captain 1st Rank A. Smelkov and Captain 1st Rank V. Isak: "...And Seven Feet Beneath the Keel (From Experience of Ensuring Submarine Navigation Safety)"]

[Text] Instances of submarines colliding, getting into trawls, as well as running aground are not isolated. The reasons for the appearance of such incidents are of both an objective as well as subjective nature.

One of the most responsible and potentially dangerous maneuvers is when a submarine comes up to periscope depth. In addition to generally accepted safety measures spelled out by instructions and manuals, we propose to use a standardized NTDS in the navigation safety support mode to monitor this situation. Here it is necessary to observe the following conditions:

The central scan indicator scale is selected as equal to the navigation radar long-range scan scale;

A "safety circle" of 2 nm when operating in the coastal zone or 4 nm outside that zone is transferred to the screen;

The passing problem is solved and lines of relative movement of all targets or the most dangerous targets are lit up for 30 minutes;

Coordinates and target motion approved by the submarine commander are input after they are averaged with consideration of confidence factors of the data of the combat information center, NTDS and navigator;

The situation is transferred to the NTDS module, permitting the submarine commander at the commander's periscope to observe and estimate the situation in the darkened control room.

To preclude dangerous closing with fishing vessels, it is necessary to take into account that when catching fish with a trawl, with a rotation speed of vessel shaft lines corresponding to a speed of 6-8 knots, speed essentially does not exceed 2-3 knots. Not considering this in determining minimum guaranteed distance to a target can increase the likelihood of error by 2-4 times and lead to serious consequences both for the submarine and the trawler.

Modern submarine sonar systems with long target detection ranges on the one hand facilitate estimating the situation when coming to periscope depth (including through the detection of targets drifting with propulsion devices stopped), and on the other hand hamper it by the need to analyze, calculate and consider the motion of a

large number of simultaneously observed targets. Competent use of subsystems of the sonar system direct-listening channels permits additionally estimating distance to a target by the intensity of the signal in different frequency bands. In our view, it is advisable to require sonarmen to report tentative distance to targets according to the spectrum and nature of their noise. From the presence of high-frequency components in the noises of surface targets, an experienced sonarman faultlessly identifies the most dangerous of them with a range of less than 4 nm from the submarine. An additional source of information about nearby targets is the sonar system's sonar signals detection subsystem listening channel. As a rule, each target closer than 4 nm from the submarine can be heard well on this channel.

Distance measuring channels are highly effective. For example, in gaining basic practice in measuring distance to passing targets, an operator with an average level of qualification achieves stable skills in measuring distance even to small surface targets.

It is common knowledge that the effectiveness of using distance measuring channels depends substantially on target angle, the target's draft, type of vertical distribution of sound velocity in the water, seaway (surface state), correctness in selecting the sounding signal, operator skills in selecting the angle of inclination and directional pattern of the system array, and correctness in considering the amount of change in the bearing to the target.

The zone of confident distance measurement increases by more than tenfold under favorable sonar conditions and with relative target angles abeam. Under unfavorable conditions it is recommended that while making an all-around survey of the horizon by the direct-listening subsystem before coming to periscope depth, at the same time survey the horizon in the active mode on the maximum range scale with the minehunting set (channel). Here even small-displacement vessels (such as a harbor tug) are confidently detected at the scale limit, which permits taking steps to preclude dangerous closing. For operating in a surface condition, the combination use of the direct-listening and distance-measuring subsystems can serve as a reserve for covering the close-in surface situation when radars are forced to be turned off.

In our formation the experience of using portable VHF radios such as the Prichal, Transport and so on on the "safety channel" for mutual information with passing ships, especially fishing vessels, generated great interest in submarine commanders. Establishing radio communications on the "safety channel" with a nearing vessel is widely practiced by vessels of civilian departments on the White and Barents seas. This allows a submarine at periscope depth or in a surface condition to direct the attention of a vessel approaching to a dangerous distance to herself, to indicate her position, and to discuss the procedure for a safe passing. When a fishing vessel enters an area prohibited for navigation her captain can be

informed of this and it can be demanded that he leave the area so as not to create mutual danger. In the presence of radiotelegraph posts, it is advisable to transmit information via them, simultaneously monitoring the "safety channel" so as not to allow distortions of information being transmitted.

With the increase in numbers and technical outfitting of the fishing fleet, there is a constantly growing likelihood of a submarine that is restricted in maneuvering by the limits of the given area getting into trawls. The length of fishing equipment and depth of its use increase from year to year.

Direct-listening subsystems of modern sonar systems easily hear noises of a trawl against the background of the trawler's own noise. The characteristic "tapping" and "tinkling" of a trawl are confidently observed at a distance of up to 3-5 nm. With a sonarman's report about detecting the noise of a towed trawl against the background of a surface target's noises, the distance to it should be considered as no more than 1.5-2.0 nm and it is necessary to maneuver decisively for safely passing the trawl.

The operation of fishhunting sonars often is observed by the sonar signals detection subsystem when operating near areas of an intensive fishery. Their basic technical characteristics are given in the table.

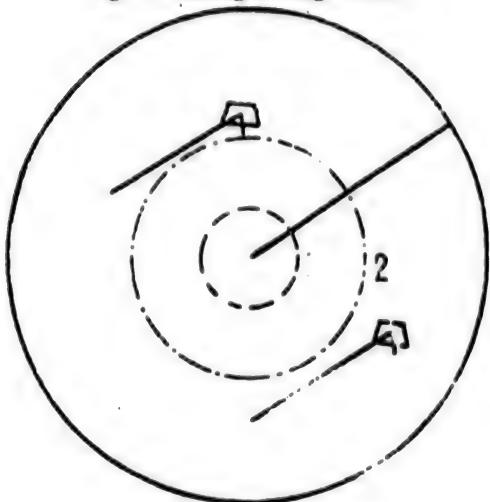
Sonar Type	Operating Frequency, kHz	Repetition Period, seconds
Priboy-101	19.7	1.0-5.0
Paltus-PI	19.7	1.0-4.5
Sargan-K	20.0	1.5-4.0
Simrad (Norway)	21.0	1.0-4.0

In view of the low radiated power and features of these sonars' directional characteristics, they are detected at short ranges of 2-4 nm. On receiving a report about detecting a sonar with an operating frequency of 18-21 kHz and a repetition period of 1-5 seconds, the distance to the trawler should be considered as no more than 1 nm and one should decisively maneuver for passing at increased speeds. It must be taken into account that on the fishhunting radar screen the submarine will appear as a school of fish of average or large size depending on target angle and submarine displacement. As a result, a trawler usually maneuvers to close. In that situation it is recommended additionally firing a combination signal cartridge and sending a few air bubbles to the surface to warn the fishermen of dangerous maneuvering. It is advisable to use the sonar system distance measuring channel for targets classified as fishing trawlers to monitor distance and preclude getting into a trawl.

A feature of a fishing vessel displayed in the combat information center and NTDS is that the trawler is denoted by an area with a 3 nm radius with the center in the calculated target location. Then the problem of passing the area at a selected distance is solved. Problem

solving is simplified in the NTDS if, in addition to a "safety circle," a "fishing circle" with a 9 nm radius is lit up around the submarine on the central scan indicator and the passing problem is solved at a distance of at least 9 nm (Fig. 1).

Fig. 1. Passing fishing vessels:



Key:

1. "Safety circle" with 4 nm radius
2. "Fishing circle" with 9 nm radius

The article by Ye. Volobuyev¹ went into ensuring navigation safety when operating in a narrows in sufficient detail. We propose to examine additional commanders' techniques reducing the likelihood of running aground in a narrows.

One precautionary measure developed by nautical practice when submarines operate in a narrows is to warn the engineering department head about the possibility of reversing. Experience has shown that this measure is insufficient without a check of the actual reversing of turbines. After leaving the dock and turning to the first heading for departure from the base, it is necessary to reverse turbines at a safe place designated by the formation commander with the beginning of the submarine's movement under turbines. After such a check, operators of the main power plant control post are mentally prepared to actually reverse the turbines and in a critical situation the likelihood of incorrect actions will be sharply reduced. Before entering the narrows, the readiness of the main power plant control post to give reverse is checked in a similar manner, after which auxiliary shaft lines are prepared for operation. When ready, their operation is checked in forward and then in reverse. Such a methodology permits personnel of command posts and battle stations to act confidently when particular ship propulsion and control equipment actually malfunctions, without permitting a precondition for an accident to develop into a serious incident. Experience shows that to gain confident skills precluding erroneous operator actions and aggravation of the situation, it is

necessary to repeat the entire sequence of commands and actions in ship emergency drills at least ten times. The crew's teamwork in critical situations is checked by the formation staff during the check of the ship's readiness to put to sea at least two days before her departure.

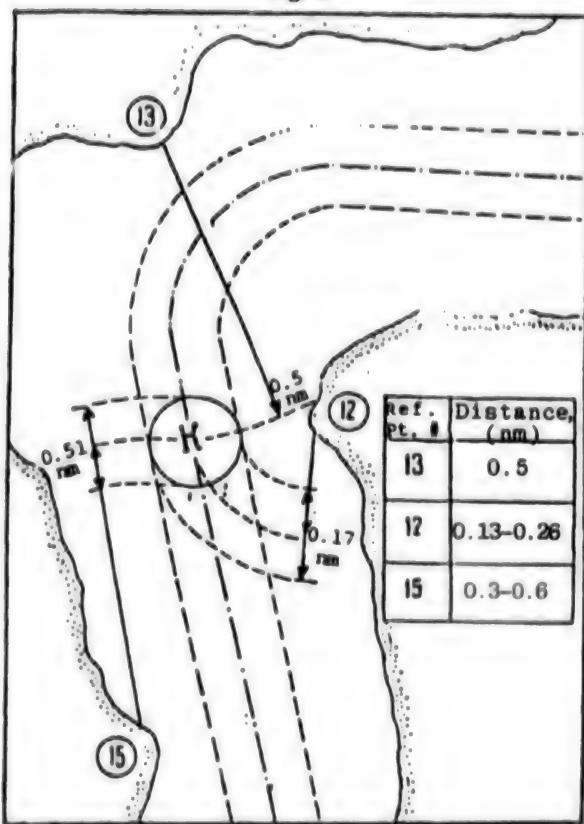
A uniformity of views on the methodology for the commander to personally monitor the submarine's location in a narrows was not simple to work out. Around a dozen versions were proposed for submarines, the bridges of which are poorly outfitted with equipment for measuring navigation parameters. As a result the simplest and most reliable method was chosen for checking a submarine's location according to preselected "commander's" reference points using a radar. A red letter "K" in a red circle is inscribed on the plotting boards of the commander, radar operator and combat information center in the place selected by the commander (as a rule the most dangerous place on a given tack) at a precisely fixed distance to a reference point ahead along the submarine's course. At this point, for example, the radar operator reports: "Commander's location. Reference point 13-5; 12-1.7; 15-5.1." On the commander's plotting board (Fig. 2) on an enlarged insert which permits comparing navigation parameters that were read with permissible ones under conditions of low illumination, rain or snowfall, the commander determines whether or not the submarine location is in the selected movement zone and informs the control station and navigator: "Location determined by commander. We are in movement zone (right 20 m, left 30 m)." The navigator formalizes the commander's observation in the navigational data log. After several practices, the above methodology for the check relieves the commander of the need to be diverted from shiphandling for long at the most important moments to seek out in the darkness the point of intersection of thin lines of isostadia of selected reference points, and at the same time he personally assures himself that the ship is proceeding along a safe route.

Under conditions of good visibility for an making an operational estimate of the correctness of the maneuver being executed and for checking the time of turns to the new course, it is advisable for the submarine commander to make use of "zeroed" pilot reference points. For example, the submarine's turn should begin at the moment the line of sea-marks opens.

A stopwatch is one means of checking the work of the navigator and combat information center. The executive officer works with it on the bridge in passing a narrows. He monitors the time on a selected course and the time five minutes and one minute before the turn from the navigator's reports. Such systematic control will permit avoiding gross blunders in estimating the time for turning to a new course.

The minehunting set has proven to be an informative means of observation in a narrows. In addition to putting out the distance to reference points along the submarine's course, it permits estimating the safety of

Fig. 2.



passing boom openings and recommended course buoys and the precision of movement along a canal axis.

High effectiveness of the sonar system distance measuring channel also can be realized in determining a submarine's position both in a surface as well as submerged condition based on reference points as well as on a spread of bearings and distances.

The experience of using portable laser rangefinders of modern submarines also is of some interest. Their presence enables a commander on the bridge to measure distance to reference points himself.

The malfunctioning of ship communications equipment is especially dangerous before turning into a narrows. Although bridge communications with the control room and with the propulsion equipment and steering control station has triple redundancy, including voice communications through the pressure hull conning tower, the experience of exercises on departing base under adverse sea and weather conditions, especially in the fall-winter period, has shown the convenience of using Prichal VHF radios for bridge communications with the control room and navigation room. In preparing for action and deployment, radios are located there and communications are checked on any channel apart from the "safety channel."

In conclusion we would like to note that the formation command element sees one of the basic directions of its work in questions of ensuring submarine navigation safety to be generalization and introduction of foremost experience of seamanship and psychological preparation of commander and crew for operating under difficult conditions. The guarantee of navigation safety lies in painstaking work ashore. Ignoring practices and exercises leads to a reduced level of preparation even of an excellently rehearsed crew and is fraught with dangerous consequences. In checking readiness of ships for putting to sea and in the process of preparing the commander and crew ashore it is necessary to "play through" the maximum possible number of difficult narrative problems which a commander may encounter at sea. Multiple repetition of these situations under different variants will permit preparing the crew for them, avoiding stress situations, and developing swiftness in making correct decisions.

In simulating various situation variants, it is necessary to make them successively more complicated, shorten the time for decisionmaking, and give additional narrative problems (such as the vertical rudder jamming in a turning circle, malfunction of the radar, sonar, or navigation system, a decrease of visibility to zero in a snow flurry, an emergency situation in one of the submarine compartments, partial or total malfunctioning of propulsion equipment or the ship's loudspeaker system before beginning a maneuver, and a sharp change of depths beneath the keel or of a magnetic compass heading in a fog).

In clocking the time the crew needs to cope with a typical narrative problem, it is easy to establish that an excellent crew loses its skills and requires additional practice in the time of leave or period of repairs between deployments, and a lagging crew achieves best indicators with persistent work.

It is necessary to apply much effort to ensure that the "commander's hour," "watch officer's hour," and the monthly deployment critique become activities where questions of ensuring navigation safety and new procedures for ensuring it are subjected to a detailed analysis at various levels. An exchange of experience among commanders represents the greatest value. Each non-standard situation is made the basis of new narrative problems in practices and control exercises. This will help prepare a crew for actions under such conditions.

The formation command and staff generalize foremost experience of the best crews and subject procedures and methods which have given a good account of themselves to a thorough analysis. Special manuals, instructions, recommendations, instruction pamphlets and check sheets are worked out on this basis. Guidance documents worked out in the formation can serve as an example:

Submarine commander's special manual for ensuring navigation safety in a narrows as well as in areas of intensive shipping and fishing;

Special manual on organizing the interworking of the control center, combat information center and navigator;

Submarine commander's instruction pamphlet on use of surveillance equipment for estimating the situation;

Commander's instruction pamphlet on the methodology of personally checking position in a narrows;

Submarine commander's instruction pamphlet on preventing contacts with fishing equipment;

Check sheet of a submarine's readiness for operating under adverse navigation conditions;

Check sheet on preparation for coming to periscope depth (while under way and at a standstill);

Recommendations on operating in arctic areas, and so on.

We are ready to share our developments with colleagues.

Experience in holding joint practices and a base exercise of a submarine formation and a formation of mine-sweeping ships showed that after eliminating the "inter-departmental" barrier, several practices are sufficient to begin conversing with interworking forces in the same language. For this commanders would have to meet in training center offices and exchange experience. It is to such an exchange of experience that the authors would like to invite ship commanders.

Footnotes

1. Ye. Volobuyev, "Turning in a Narrows," MORSKOY SBORNIK, No. 2, 1987, pp 45-47.

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Role of Carriers in Balanced Fleet

92UM0777C Moscow MORSKOY SBORNIK
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pp 27-31

[Article by Rear Admiral (Retired) F. Matveychuk, doctor of naval sciences, professor; Vice Admiral (Retired) V. Babiy, candidate of naval sciences, docent; and Captain 1st Rank V. Potvorov, candidate of military sciences: "Air-Capable Ships: Element of a Balanced Fleet"]

[Text] In recent years certain mass media have been attempting, and not unsuccessfully, to persuade the public of the inadvisability of building air-capable ships for our Navy.

The argument of the ships' high cost is advanced here as the primary argument. On the other hand, a thought is suggested about the vagueness of their combat tasking, insufficient combat stability and insufficient combat capabilities. As a rule, objective arguments and proofs with application of methods of scientific analysis are not

used. It seems necessary to introduce clarity to this matter, relying on results of evaluations based on quantitative (numerical) indicators obtained on the basis of modern methods of military-economic substantiation of decisions in the area of construction and combat employment of fleet forces. Let the reader pardon us for the forced need for a brief interpretation of methods and criteria of quantitative evaluations in the situation in question.

We will stipulate in advance that we will be speaking of air-capable ships (heavy air-capable cruisers) of the Admiral Flota Sovetskogo Soyuza Kuznetsov Class. In contrast to the four previous ships, this one is a new, general air-capable ship. Her fundamental distinction is that modern Su-27 and MiG-29 fighters which take off from the deck airplane-style can be based on her.

Cost-effectiveness. First of all about absolute cost figures. Writings have cited a figure of R1.5 billion (in 1989-1990 prices), which is approximately three times higher than actual expenditures for building the ship proper less the aircraft based on her. That distinction must be made for an objective evaluation, for regardless of whether or not we will have an air-capable ship, the number of fighter aircraft (ground-based or ship-based) necessary for accomplishing combat missions still will have to be created. And arguments about increased cost under inflation conditions are aimed only at generating negative emotions without understanding that the situation essentially will not change in a relative calculation.

In speaking of the cost of building the ship as a whole, it is also not quite proper to be silent about an indicator such as expenditures per construction year (a heavy air-capable cruiser is built over 5-7 years), because the budget is apportioned by years. It is necessary to agree that one must strive to lessen the cost of each project, and in our view there are real ways to do this. For example, it is possible to consider the proposal not to outfit the ship with a cruise missile system.

Secondly, it is impermissible to consider the cost of an individual ship class in isolation, independent of the overall makeup of fleet forces, especially as modern theory for substantiating naval organizational development is based on the concept of balance.

New-generation air-capable ships are outfitted basically with fighter aircraft. Hence their purpose is quite obvious: fighter air cover of fleet forces, i.e., accomplishing missions to increase their combat stability. Submarines incapable of offering fire opposition to ASW aircraft in the present stage, as well as naval reconnaissance, missile-armed and ASW aircraft which do not have sufficient means for opposing enemy fighter aircraft require this cover above all. Since our air-capable ships are intended for accomplishing basically defensive missions, then as the criterion of the advisability of creating such a ship, a military-economic evaluation makes a comparison of her cost and the cost of fleet forces which will not be destroyed by the enemy, i.e.,

which will retain their combat effectiveness as a result of the air-capable ship performing her defensive functions. That evaluation method completely conforms with the well-known principle formulated by prominent mathematician Academician A. N. Kolmogorov. The essence of the principle is strict conformity between the selected effectiveness evaluation indicator and the goal of actions to be performed (purpose of the system in question). This is the foundation of the theory of evaluating effectiveness of the most varied systems, including military.

An evaluation according to that principle shows that the cost of those submarines, surface combatants and naval aircraft whose loss can be prevented by fighter cover exceeds the cost of the air-capable ship by severalfold. This is scientifically substantiated proof that rejecting the creation of air-capable ships will result in a high cost of losses.

Another evaluation can be cited along with the evaluation of economic expediency of building air-capable ships: the number of navymen performing combat missions who will not perish, i.e., possible prevented personnel losses because of fighter cover compared with the situation if the air-capable ship were absent. It is not difficult to define prevented losses as the sum of the numerical strength of crews of preserved ships, submarines and aircraft.

To this should be added that the Navy will be fighting forces whose basic role is to destroy industrial and military installations located in the interior of the country's territory, and by disrupting these strikes the Navy will save the lives of many, many civilians.

We do not consider it possible to engage in polemics in this matter with those who are skeptical toward such an argument. This aspect is perceived especially acutely by navymen when enemies of building air-capable ships propose "to direct freed-up funds to increase the welfare of servicemen's families." Here is one of the points of a January 1990 appeal to the USSR Supreme Soviet Committee on Defense and State Security from Navy officers who command submarines and surface combatants, from naval aviation pilots and from engineering-technical specialists: "From a moral and ethical viewpoint we consider it immoral to connect increased welfare of servicemen's families with rejection of the creation of a strictly defensive ship, an air-capable cruiser; in a combat situation this will be the reason for the unjustified loss of our people, navymen. The mothers and wives of those who serve in the Navy and who as fate has willed it will end up as navymen hardly will wish to take advantage of any blessings at the cost of increasing the risk to the lives of their loved ones." There are hundreds of signatures beneath the appeal.

Purpose. It follows from the above that our air-capable ships are intended for performing missions of fighter cover for fleet forces. It would be possible not to focus attention on this especially, but enemies of creating this

type of ship are constantly trying to identify our air-capable ships with aircraft carriers of other countries' fleets. This gives rise to various conjectures about purposes for creating such ships. Things come down to a serious discussion of possible results of a combat clash of our heavy air-capable cruiser with an American aircraft carrier, one-on-one, so to speak. The absurdity of such a tactical situation, as well as of everything stemming from this incorrect impression of the purpose of the air-capable ship, is easily proved.

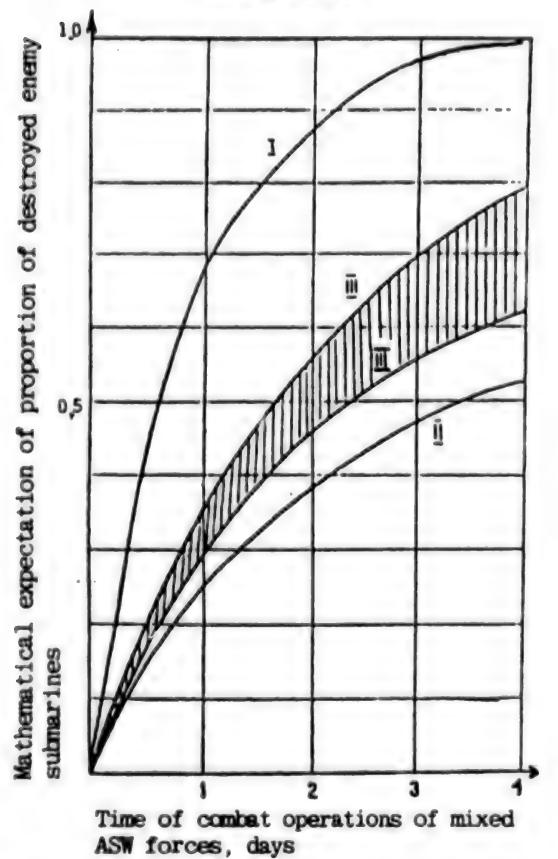
In addition to all other factors, the effectiveness of accomplishing any combat mission depends on potential capabilities of a specific makeup and combat stability of force groupings.

With certain assumptions it is possible to approximately represent the probability of performing a combat mission such as destroying an enemy carrier as the product of the probability of her destruction resulting from use of offensive weapons and the probability of platforms for these weapons preserving combat effectiveness up to the moment they are employed. The contribution to accomplishing a combat mission is manifested through realization both of offensive as well as defensive potentials. If one is unsuccessful in preserving combat effectiveness, then increased offensive potential loses meaning.

Let us consider three options for accomplishing a mission such as conducting a naval battle to destroy an aircraft carrier. The first option is that submarines and missile-armed naval aircraft deliver strikes against the carrier. The second is where those same forces operate together with aircraft of the heavy air-capable cruiser and deliver a strike together with them. The third is where strikes are delivered by submarines and naval missile-armed aircraft, and the air-capable ship performs the mission of providing fighter cover for these forces against the opposition of enemy ASW and fighter aircraft. In the second option the increased effectiveness of mission performance (compared with the first one) will be only a few percentage points. In the third option the effectiveness of accomplishing the mission increases by 30-50 percent (depending on the tactical situation) and, also of no small importance, possible losses of offensive forces are reduced by an average of one-third.

If we consider the operations of a mixed ASW force grouping in a designated area over an established time, the effectiveness of the grouping's ASW operations is reduced by at least twofold as a result of possible opposition of the air adversary. Use of the air-capable ship for providing fighter cover increases the effectiveness of the mixed ASW forces' operations under conditions of intensive pressure against them by the air adversary by 1.2-1.5 times (Fig. 1). Here the probability that task groups and units of the mixed ASW forces are not destroyed increases by 1.4-2.0 times compared with the case where the mixed ASW force grouping operates without the air-capable ship's cover (Fig. 2).

Fig. 1. Effectiveness of operations of a mixed ASW force grouping:

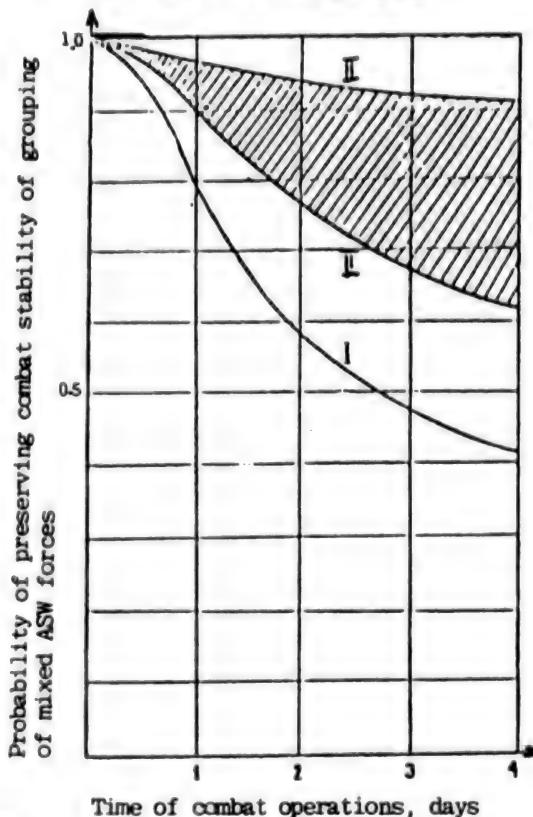


Key:
I. Without enemy air opposition
II. With opposition of enemy aircraft and without fighter cover
III. With opposition of enemy aircraft and in the presence of fighter cover

Therefore it is impossible to agree with the opinion that appropriations allocated to the Navy must be used to create offensive forces and we must reject creation of defensive forces, including heavy air-capable cruisers. The principle of creating a balanced fleet is disrupted with this approach.

Combat stability. It is also necessary to introduce clarity in this question, since the concepts of survivability and combat stability are confused. The concept of survivability also is interpreted primitively: a so-called mean necessary number of hits for destroying a ship as a descriptor of the exponential rule of destruction is taken as the sufficient number of hits. We will explain: 1.5-2.0 times more hits are needed than the mean characterizing the exponential rule in order for the probability of destroying a target to be 0.80-0.90. Our air-capable ships concede nothing in survivability to aircraft carriers of similar dimensions in fleets of other countries.

Fig. 2. Probability of preserving combat stability of mixed ASW force grouping:



Key:
I. Without fighter cover
II. With fighter cover

And with respect to combat stability, it largely depends on organization of the ship's employment. Let us refer to foreign experience. Their aircraft carriers are employed from combat tasking areas located in zones of supremacy of friendly fleet forces, and ship-based aircraft operate to the full radius even beyond the zone of supremacy. We also do not see a different, more advisable, organization of employment for our air-capable ships as well, and arguments about the isolated employment of our heavy air-capable cruisers in remote areas simply are bewildering. With such an approach to employing these ships it makes no sense to argue about their vulnerability.

At the same time, attempts to "prove" poor combat stability by presenting models in which almost all enemy forces in a TVD [theater of military operations] are removed from accomplishment of their inherent missions and are targeted only on destroying the air-capable ship according to the principle of "as much as is necessary will be assigned" are completely unjustified.

If the combat maneuvering area of the heavy air-capable cruiser is situated in our zone of supremacy, then as shown by simulation results, to counter that principle it is possible (with competent employment of forces) to organize a rather reliable defense of the grouping and at the same time also of the air-capable ship herself and

thereby possibly force the enemy to give up accomplishing missions other than combating her. As a result, accomplishment of missions by other fleet forces is simplified and facilitated.

Simulation of possible operations by opposing sides shows that as part of a force grouping the air-capable ship possesses a combat stability that essentially is not reduced with the realistically possible intensity of pressure against her by enemy offensive air forces and weapons.

It should be emphasized in particular here that questions of the air-capable ship's combat stability cannot be an end in themselves and are decided in the overall system of building anti-air, ASW and other kinds of defense and combat support in a TVD.

At times the opinion is expressed about the possibility of accomplishing missions of providing the fleet fighter cover by aircraft based on land airfields. The groundlessness of such opinions is as follows. Operations from a ground alert situation are the main and most economic method of covering fleet forces for shore-based fighter aircraft. Calculations show that with consideration of the possible forward movement of airborne early warning aircraft, the fighter cover zone realistically will be 150-250 km (from a ground alert status). Here the radar zone for detecting the air adversary must be 550-700 km for a squadron or regiment of aircraft. A further increase in the radar detection zone essentially is impossible.

But if we still try to broaden the zone of fighter cover, it will be necessary to use fighter aircraft from an air alert status. In this case an unrealistically large number of sorties per day will be required, since the necessary detail of fighters grows extremely swiftly depending on the distance of their air alert zones from base airfields and the forces being covered. In this situation the only force capable of covering fleet forces is deck-based aircraft based on air-capable ships.

Organization of combat employment. The arguments and substantiations we have cited hold true on condition of proper organization of combat employment of new-generation air-capable ships. Considering the objectively existing need for balanced fleet development as well as for comprehensive employment of all naval arms and other branches of the Armed Forces, it can be asserted that in accomplishing primary missions (fighter cover of forces), air-capable ships must be employed in the overall fleet air defense system in designated areas independently or in coordination with other force groupings of the fleet, Air Defense Forces, and air forces of maritime fronts. Areas of fighter cover for fleet forces must be assigned for air-capable ships chiefly beyond the zone reached by land-based fighters. The ships themselves as a rule must be in zones of supremacy of our forces and must operate in a battle order. Command and control of them must be exercised by a specially trained command element and staff located in the air-capable ship's area of combat mission performance and capable

of reacting flexibly to a situation change and of organizing precise coordination not only with the covered fleet forces, but also with large strategic formations, formations and units of the Air Defense Forces and air forces of maritime fronts.

Mobile, effective employment of air-capable ships in air defense systems of the fleet and force groupings, as well as the precise, efficient command and control of combat operations can be achieved to the greatest extent with a constant (authorized) makeup of forces operating together with the air-capable ships. Therefore it appears that the presence of an independent formation with a constant makeup of forces and, most important, of a command element and staff prepared organizationally, technically and mentally to exercise command and control over operations of ship and air forces, permits providing greatest effectiveness of operations by air-capable ships with fewest efforts and expenditures.

Mention must be made about one other aspect of the discussion. One often has occasion to hear the opinion that we should have not air-capable cruisers, but aircraft carriers in the full meaning of this concept, similar to the American Nimitz-Class, for example. In sensibly evaluating our state's military-geographic position and the insolvency of ocean strategy, we consider this path to be inadvisable for us, but we defend with full awareness of our correctness the Navy's need for air-capable ships such as the heavy air-capable cruiser Admiral Kuznetsov, intended primarily for performing missions of fighter air cover of forces at sea and establishing a forward line of the country's air defense from the direction of the sea. Our conviction is based not only on calculations, but also on a comprehensive analysis of various tactical situations, including a check of recommendations worked out on tactics during the conduct of command and staff exercises.

Unquestionably, in focusing attention on employing aircraft of heavy air-capable cruisers for air defense purposes, we also do not exclude operations against light surface forces and submarines (chiefly for self-defense). But in considering the well-known provision that "nothing is free," in our opinion it would be unjustified to advance demands for modifying the SU-27 fighter-interceptor in order to employ it against surface targets. It is hardly possible to do this without detriment to the fighter's combat capabilities of combating the air adversary.

We consider the practice existing to this day where tactics of operations were "adapted" to an already built ship to be insolvent. In that state of affairs there is no feedback, i.e., tactics insufficiently influenced requirements for the project being created, but was content with what already had been embodied in metal. But it should be the other way around. Tactics should be worked out in the conceptual design stage and substantiated requirements for the ship's tactical-technical parameters should be advanced on that basis.

Correct conclusions about the advisability of building new-generation air-capable ships for our fleet, their purpose, combat capabilities, combat stability and combat employment are possible only when examining these ships in the overall structure of fleet forces as a complex, multifunctional, balanced system.

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Does Fleet Need Aviation Schools?

92UM0777F Moscow MORSKOY SBORNIK
in Russian No 1, Jan 92 (signed to press 28 Jan 92)
pp 49-51

[Article by Colonel Yu. Morozov]

[Text] Graduates of the Orenburg Aviation School froze in parade formation on the parade ground on a sunny fall day. The naval officers' full dress uniforms emphasized the solemnity of the moment—presentation of diplomas on completion of the educational institution. "A few days will pass and the newly-made lieutenants will scatter to the fleets and join aviation collectives, beginning the count of their officer career." That was the thought of Naval Aviation representative Gennadiy Andreyevich Khramtsov, who was attending the graduation together with representatives of city authorities and parents and relatives of the former cadets.

"How a uniform still changes a person," flashed through Gennadiy Andreyevich's mind. Just yesterday it was difficult to perceive future naval pilots in the cadets dressed in Air Force uniforms, but today how the people had been transformed! True, transformed outwardly, he immediately corrected himself; essentially they remained Air Force pilots with those traditions laid down in the school and consequently they will require additional training in combat units for "getting their sea-legs."

Gennadiy Andreyevich recalled youthful years when, dreaming of service in aviation, he decided specifically to which school to send documents. His choice then probably was determined by V. Kaverin's novel "Two Captains." He was attracted by the romance of service of naval arctic pilots and their chief principle in life—"fight and seek, find and do not give in." Taking it for his own credo, Khramtsov followed it all his subsequent life from aviation school cadet to major general of aviation and deputy chief of staff of Naval Aviation.

Of the nine schools which prepared cadres directly for Naval Aviation, Gennadiy Andreyevich chose the Naval Mine-Torpedo Aviation School. What were the advantages of specializing in a naval direction? Evidently the fact that naval pilot training was based on naval traditions and on the role and place of Naval Aviation in the Navy. And from the first days, cadets were proud of belonging specifically to Naval Aviation and to the two elements—air and sea. This was preparation for service that was difficult even without that, and also under conditions where there was not firm Mother Earth

below, but water—a boundless expanse with very rare reference points and at times with their total absence; water, which does not at all guarantee rescue even with a successful parachute splashdown if an aircraft was shot down or had an accident. And what strength was required by the fight for life on the high seas! This was the very strength lacked by Captain Yefremov's crew, which made a forced landing on the water near Kamchatka Peninsula in February 1988. And the history of Naval Aviation preserves many such examples.

At that time mockups both of our own as well as foreign ships and submarines stood in school halls. They were studied and people knew them so that a cursory glance from the air was sufficient to determine precisely the class and type of ship from the configuration and outlines, and her speed from the size of the wake. Much attention was devoted to the study and practical use of emergency rescue equipment. In the second and third course cadets spent three months of seamanship aboard naval ships and vessels, particularly aboard the training sailing vessel "Dunay" and the battleship "Novorossiysk." They made small transits as part of the crew. They were taught to handle rigging and were familiarized with the purpose and operation of various systems and hardware, with the work of battle stations, and with code signals and nautical terminology. And subsequently, in flying missions over the sea, this knowledge inspired additional confidence in them and helped them interwork competently and precisely with naval ships. And it is a great pity that at the present time these traditions have been lost. Moreover, in that period the school had many instructor-pilots and instructors who had gone through the war in Naval Aviation. Their experience was invaluable, not to mention the fact that people tried to emulate them and became even more entrenched in the awareness of the correctness of choosing the profession of naval pilot.

In 1956 USSR Minister of Defense Marshal of the Soviet Union G. K. Zhukov signed an order which stated: "In order to establish a unified system for training flight and engineering-technical cadres for the Air Force and Naval Aviation..." And transfer of all Naval Aviation military educational institutions to the Air Force began.

Perhaps under conditions of that time there were objective premises for a transition to a unified training system. The Air Force and Naval Aviation were shifting to jet technology. Fewer aircraft were left which could land directly on the water. Flying techniques were approximately the same and possibly pilot training methodology really required a unified system. Much was acquired, but for Naval Aviation much also was lost. In addition to the fact that future naval pilots already were studying actions over the sea against enemy surface ships and submarines considerably less, fleet traditions were lost and pride in their profession—specifically in the profession of naval pilot—also was lost. The fact is, love for it originated with the cadet schoolbench. In time people somehow ceased to differentiate whether or not an officer served in Naval Aviation or the Air Force:

migration increased. And only the older generation still carries within itself the conviction that Naval Aviation traditions must be maintained and that they differ substantially from Air Force traditions.

The question of returning aviation schools to the Navy has been raised repeatedly. For example, in connection with the transition of aviation schools to teaching cadets only in trainer aircraft, the question was posed back in December 1987 about purposeful training of flight personnel of ship-based aviation. They based themselves on the fact that in all Air Force schools which were training cadres for Naval Aviation and stationed far from the coast, there were no conditions for creating a training facility capable of providing purposeful training of cadets. There was no opportunity to teach the practice of flying over the sea, which is extremely important not only for mastering instrument flying, but also for mental readiness for flying under conditions of heightened risk. There were no conditions for practicing flights from the deck of ships, for combat employment of equipment for hunting and killing naval targets, or for training in actions together with other fleet forces. Therefore another 10-12 months were spent training pilots after their four years of training in Air Force schools, and more than two years in ship-based aviation.

Considering the need for a substantial reduction in time periods and the specifics of training flight personnel for Naval Aviation, it was proposed to return to the question of returning to the Navy the Yeysk Higher Military Aviation School for Pilots, where it would be possible to create appropriate conditions for training pilots of ship-based aviation.

With a positive decision on the question, it was planned to create a training facility with a naval direction in this school with lesser expenditures, taking advantage of the proximity of the sea, the naval ranges and support forces. This precluded the need to specialize training for us in Air Force schools. The capacity of the Yeysk School would permit covering the naval requirement for flight personnel for all its air arms, including with consideration of the program adopted for building air-capable ships.

The question at that time was left open. It is being studied at the present time as well.

True, there is also another point of view. Why transfer schools to the fleet, people ask, when it is possible to make a naval direction in the existing training system as well? For example, make a course or direction which would prepare pilots purposefully for Naval Aviation in that same Yeysk School, which before 1956 was a Naval Aviation school. This is not difficult to do in principle from an administrative standpoint, but it will hardly permit reviving traditions inherent to a naval school proper, not only because we have not renounced inter-departmentalism, but also because under such conditions it is very complicated to fully reveal capabilities for

educating a pilot specifically of Naval Aviation. Therefore it is hardly advisable to train both Navy pilots and Air Force pilots in the same system. And how can this be done when the absolute majority of school pilot-instructors themselves never served in Naval Aviation? It only seems to some who have not flown over the sea or landed on the deck of ships that there is no substantial difference between making a landing on a ground airfield and a ship, but even psychologically it is perceived differently. This will be confirmed by any pilot who has had occasion to serve in the Navy.

Well, the main argument for returning to the Navy the schools training pilots for Naval Aviation is the need for changing the very methodology of training pilots for ship-based aviation. This is not a simple question. Of course, if we believe that Naval Aviation wants to receive the schools only for the sake of prestige, only in order to say proudly: "We ourselves are training cadres for us," then of course there is no reason to make such a fuss and we should work within the system in which we are working now. But having assumed the responsibility of establishing a new pilot training system, above all for ship-based aviation, and having in mind training such that they would be ready to conduct combat operations from air-capable ships and from shore and would definitely know and understand the specifics of naval force operations, it is necessary to clearly see that this is impossible to do at one swoop.

Implementation of such a decision will require at the very least several years, during which the training program must be changed consistently and gradually and instructors above all trained for this. And it is necessary to take not those cadets who simply wish to master this profession, but above all those who are capable of subsequently mastering this complicated form of flying techniques, especially the ski-jump and catapult takeoff and the arrester-gear landing. And as for the others, to determine where they are capable of flying: in fighter aviation, ground attack aviation or in heavy aircraft with dual controls, i.e., this will depend above all on a person's abilities. It is clear that there will be problems, especially as the country now is experiencing a difficult socioeconomic and political crisis. The laws "On Universal Military Obligation and Military Service" and "On the Status of Servicemen" have not been adopted for now. And how can they be adopted if it is not clear for now what a future Union will represent? There is no precision in plans for developing the Armed Forces, the Navy, or its aviation, but it is impossible to live only for today.

Therefore Gennadiy Andreyevich addressed the young lieutenants with the following words: "The complicated situation in the country, not understood by all or always understood, leaves a specific imprint on your mood and mine. A reform of the Armed Forces is being readied, their reduction by 700,000 persons has been announced, and the program for up-arming Naval Aviation is not being fulfilled within the planned time period. Calls are sounded for reducing the Union army and creating

Armed Forces in sovereign states of the economic alliance. Those are the realities of our modern times. But everything passes, while life remains, whose meaning for us is service to the homeland and our people. No matter where you serve, no matter what you are called or named—comrade officers or gentlemen officers—remember the principal purpose of our profession is to protect our people and our homeland. Profess faith in man, in troop comradeship and in the principle of officer honor: service to the homeland, love to the woman, and honor to no one. I have the honor..."

Perhaps Gennadiy Andreyevich played the hypocrite a little in being silent about the fact that on arriving in a unit and encountering the reduction in the Armed Forces, some of them evidently will have to leave the ranks of officers already in 1992, and then bend a maximum of effort to restore their moral and material position, no matter how our command element tries not to repeat mistakes made in the 1960's.

And returning in thoughts from the fate of lieutenants to the fate of the Armed Forces, he clearly saw that the Army, like any complex system, can easily lose its balance and fall into decay. And decades will be required to restore its ability to precisely perform its functions. The danger of marking time and of delay in making decisions meeting current conditions has been demonstrated for us by history more than once. Therefore, seemingly, it is also necessary to approach the specific question of today's reform—transfer of aviation schools to the navy—in a weighed manner, having considered and substantiated all pros and cons, and definitely with consideration of a thorough analysis of the entire situation in the country and in the Army.

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Recent Events in Crimea, Fleet Reviewed

92UM0871B Kiev NARODNAYA ARMIYA in Russian
31 Mar 92 p 1

[Article by Lt Col Nikolay Gorenko, NARODNAYA ARMIYA correspondent: "News from the Black Sea Fleet and the Crimea"]

[Text]

Passions Are Boiling—Training Continues

Despite the lack of a political solution to the fate of the Black Sea Fleet, scheduled combat training is proceeding on ships and in units and subunits of the coastal forces. For example, the fleet command authorities gave a high evaluation to an integrated sortie by a group of ships to search and destroy an underwater "enemy" and repel attacks by airborne targets last week. Having carried out diverse missions with high marks, crews of the Admiral Golovko guided-missile cruiser, the Kerch and Azov large ASW ships, the Krasnyy Kavkaz lead large ASW ship, and the Pytlivyy, Bezukoriznennyy, Ladnyy, and

Razitelnyy patrol escorts demonstrated teamwork and coordination and a high degree of controllability...

The "Round Table": Will There Be Fewer Corners in Work?

The command authorities of the Black Sea Fleet held a three-day methods assembly of assistant commanders of large units and units on working with personnel. Admiral I. Kasatonov, commander of the fleet, gave a report on the tasks of bodies working with personnel in supporting the combat training process.

Rear Admiral A. Penkin, deputy commander of the fleet, conducted a "round table" with officer-educators, the main topic of which was an exchange of opinions on the mechanism of further actions for social and legal protection of servicemen and their family members.

Will the assembly be a step forward in improving the moral and psychological climate in fleet subunits, which apparently has not improved since 20 March? As we know, the agreement of the heads of state of the Commonwealth of Independent States on the Black Sea Fleet was not adopted in Kiev, and this has not improved the mood of personnel in Sevastopol and other garrisons of the fleet...

On Thursdays at the Naval Library...

The first meeting of officers of the Sevastopol Garrison was held last week in their own debate club. The topic of the conversation was the situation in Sevastopol and Crimea as a whole. As organizers of the debate club stated, they wait for everyone wishing to argue and seek advice regarding the fate of Crimea and the Black Sea Fleet at the Naval Library every week on Thursday...

Six Percent Potential Traitors?

"Establishment and Development of the Armed Forces of Ukraine"—this was the topic of a sociological survey conducted by the military-sociological group "Kontakt" (Odessa Military District) in two brigades whose personnel evaluated their own taking of the oath of allegiance to Ukraine in this way: 43 percent took it sincerely; 46 percent took it for social and everyday reasons; a 15 percent for no specific reason.

Six percent of those surveyed who took the oath stated that they "may break the oath to Ukraine at any time..."

Should There Be a Referendum?

The train of "friendship" of People's Deputy Stepan Khmara, which visited Sevastopol on 1 March, as is believed in local political, public, and military circles, played a catalyzing role in the question of the Crimean referendum for state independence of the peninsula. As was reported to me, whereas there were 11,000 signatures in support of the referendum before 1 March, two days later there were 43,000. To date, more than 200,000

signatures have been gathered. According to the law, 180,000 "yes" signatures are enough to substantiate a referendum.

The gathering of signatures continues. It is obvious that there should be a referendum. Should the Crimea be part of Ukraine?

I Am Going into the Reserve, I Am Going for "You"...

During a recent meeting with voters, Vice Admiral V. Nekrasov, deputy of the Supreme Soviet of Ukraine, said that "henceforth on the level of the deputy corps he will defend the interests of the Black Sea Fleet and Sevastopol." A festive send-off was held that same day for the admiral as he went into the reserve.

Indeed: captains leave, but the flags remain...

Sevastopol Authority Taking off the Shoulder Boards?

As we know, from now on, there is a new authority in Sevastopol. By Decree of President of Ukraine L. Kravchuk, the deputy chairman of the Supreme Soviet of Crimea and chairman of the Sevastopol City Soviet and Executive Committee, Ivan Fedosovich Yermakov, has been appointed representative of the President of Ukraine in Sevastopol. As the representative himself stated, "with his appointment, all functions of state power pass" to him in Sevastopol. It was also stated that with the "creation of the team of the President's representative, the city soviet and city executive committee are eliminated."

Most likely, this was what served as the impetus for the fact that on 20 March at a meeting of representatives of 16 public organizations of Crimea, Air Force Colonel Ivan Yermakov, at the urgent demand of military (also supported by civilian) representatives, was brought before an officers' court of honor...

"If I had doubts before this about whether or not I would remain in the military," I. Yermakov said, "this question now is almost resolved..."

Whether or not the Sevastopol power remains in shoulder boards will not be of decisive importance for the fate of the city and its economic difficulties. But what about for the fate of the fleet? I. Yermakov stated: "The fate of the Black Sea Fleet has not yet been resolved. Its political status is uncertain. It is difficult to count on ending the political trouble over this problem."

Fleet Stylishness Is Not Cheap...

A white or black service cap costs 250 rubles in Sevastopol. Not long ago this price was much less. At the post exchange the cost of a service cap is 140 coupons, with the quality leaving much to be desired. They maintain (or the master sewers warn) that 250 rubles is not the limit...

It Is Not the Sea that Kills People

Last year, 1,800 residents of Sevastopol received various injuries while in the state of alcohol intoxication. Each month, about 300 people who like to drink end up in an ambulance. There were about 14,500 poisonings and injuries of medium severity in Sevastopol in 12 months. Out of every 1,000 residents of Sevastopol, 450 call an ambulance...

The press does not cite statistics for fleet seamen. But even without that, it can be said that it is not the press that makes the figures cited above. The fleet traditionally stands firmly on its feet...

Money from Ship Disposal to Fund Housing

92UM0857A Moscow KRASNAYA ZVEZDA in Russian
1 Apr 92 First Edition p 3

[Article by ITAR-TASS Special Correspondent A. Agureyev, special for KRASNAYA ZVEZDA: "Old Ships Will Help Our Seamen To Obtain Housing"]

[Text] A group of naval experts from the CIS [Commonwealth of Independent States], headed by three CIS Navy Deputy Commanders—Admiral I. Makhonin, Admiral V. Zaytsev, and Colonel-General O. Anikanov, visited Stapleton U.S. Naval Base in New York State.

This time our seamen were not nearly interested in either naval equipment or the level of combat readiness of their American colleagues. Admiral I. Makhonin's group arrived in the United States with an unusual goal—to work out the last details and to obtain a contract with the American side offered by the firm Technogrid Group on the construction of 30,000 apartments for the families of Russian military seamen. The first apartment buildings from this project must be ready to be turned over to the customer already at the end of this year.

These apartment buildings will be erected according to American designs and according to American technologies in Sevastopol, Saint Petersburg, Murmansk, Vladivostok, and Kaliningrad. The project's main architect is Angelo Corva. It is according to his calculations that the Sevastopol base's officers' families apartment buildings, which the seamen inspected, were constructed.

A. Corva stated to the ITAR-TASS correspondent during the interview: "The primary distinguishing trait of our project is high quality, rapidity of execution, and relatively low production cost. It is these conditions that the customers tasked the project with in the United States. Those same qualities, but while considering local conditions, will be also necessary during the erection of the apartment buildings in Russia."

The buildings, construction of which is planned on CIS [Commonwealth of Independent States] territory, will be constructed from 90 percent of construction materials, such as lumber, that are available in Russia. In accordance with the parameters set forth in the project, these

apartment buildings must withstand temperature differentials from -40° to +40°. Incidentally, American seamen live comfortably in such apartment buildings not only in New York State but also in Alaska.

However, with what funds will these new apartment buildings be constructed? It is this question that most of all interested the journalists who had gathered at the press conference after visiting the base.

"Social tasks have appeared that the government is unfortunately simply incapable of allocating additional funds to solve at the present time as a result of conducting conversion processes in our Armed Forces and the reduction of the army and navy," Admiral I. Makhonin said in his statement. "Nevikon Joint Stock Company, which permits the navy to access the foreign market and to conduct a conversation with various commercial structures in a language that is understandable to both sides, was created to solve these social problems, including the housing problem. The main thing toward which we have strived with regard to our American partners is for us to be able to comprehensively use the processes of utilization of obsolete surface ships, submarines, and aircraft to solve the housing problem in the navy. During the last five years alone, more than 400 military ships and more than 400 aircraft have been written off—this is metal which we can sell on the foreign market for convertible hard currency and build housing for seamen's families with the money earned."

Of course, this is not the only method that the seamen plan to use to find resources to finance the project. As Admiral I. Makhonin stressed further, at the present time 265 former military ships are underwater in CIS harbors. They plan to salvage them, cut them into scrap metal, and sell it on the market. The project is also very interesting because, with the laying of the first apartment building which, they assume, can already occur this summer, they will also begin the erection of a construction base which will then permit the seamen to build these apartment buildings independently.

What is more, as I. Makhonin stressed, reconstruction and expansion of naval energy-fuel facilities is being conducted at the present time. This is being done because projects for extracting and processing oil are being developed in many regions of the CIS at the present time. However, the majority of the trade ports have not been adapted for pumping the drastically increasing volume of liquid cargoes. Military seamen, having modernized their equipment, have decided to offer their services to Western firms and to also direct the money earned toward the construction of housing.

Circumstances Surrounding Poti Fleet Units Viewed

92UM0874B Moscow KRASNAYA ZVEZDA
in Russian 4 Apr 92 p 2

[Article by Captain 3rd Rank A. Grachev: "From Poti: The Opposition Is Retreating But Is not Surrendering. It Is Also Difficult for Military Seamen"]

[Text] Black Sea Fleet Commander Admiral Igor Kasatonov, along with a group of admirals and officers, visited Poti—a remote Black Sea Fleet garrison.

The situation at the garrison is difficult. Brigade headquarters is more like a fortress: barbed wire, sand bags, and seamen with assault rifles. Gun fire is heard nearly every day in the city. Supporters of ex-President Zviyad Gamsakhurdia, who are enjoying the support of a significant portion of the population, are conducting a struggle against the new administration. The city's new mayor has been beaten up and crippled and the prefecture and internal affairs directorate buildings have been burned down. Taking advantage of the confusion in the political situation, Georgian guerrillas are attacking military facilities, looting warehouses, and hijacking vehicles. In the words of Unit Rear Services Chief Captain 2nd Rank O. Nur-Davletov, nearly 2,500 tons of fuel have been stolen, 20 motor vehicles have been hijacked (it is true that seven have been returned), and more than 200,000 rubles worth of clothing and related equipment have been stolen.

Evacuation—this is already a everyday matter for the Poti seamen. The stream of evacuees is growing. And if previously some people wavered about whether or not to leave, right now any doubts have been dispelled. But there are a multitude of problems: where do the people go who have already settled in Poti, who have put down roots, and who do not have relatives in other regions of the CIS? And there are 120 such families.

Poti Commandant D. Tsiviladze, acting prefect, suggested that the commander meet with representatives of the new Georgian government. The suggestion was accepted. Time will tell if these negotiations will produce results and if the Georgian authorities will be able to help to solve fleet problems. But today people have once again become uneasy in Poti. The supporters of the ex-president who are defending the city lost nine dead and many wounded on the night of Wednesday to Thursday.

On April 3, I attempted to place a telephone call to Brigade Commander Captain 2nd Rank V. Kishchin, but I was unsuccessful.

"He cannot take any calls," answered a confused brigade duty officer. "The commander is personally leading the headquarters defense. An engagement is occurring in the city between the Zviyadists and the supporters of the current leadership of Georgia."

"Is there an attack against the military garrison?"

"So far, no. The engagement is occurring in the port area. But we are ready for any surprises..."

CIS: REAR SERVICES, SUPPORT ISSUES

Ministry Directive D-57 on Military Financial Activity in Market Economy

92UM0798A Moscow VOYENNYY VESTNIK
in Russian No 11, Nov 91 pp 6-7

[Directive No. D-57 on material-technical and financial support of armed forces under the rubric "A Topical Subject"]

[Text] In the situation of the political and economic reforms underway in the country, the present need for profound reform of the armed forces of the USSR and their entry into a market economy, and the continuing withdrawal of Soviet troops from foreign territory demand fundamentally new approaches to matters of material-technical and financial support for the troops and naval forces.

For purposes of stimulating and improving financial and economic activities in the armed forces of the USSR, increasing the independence and the authority of commanders (superiors) at all levels in the organization and conduct of unit management, and seeking additional funds for resolving the social and personal-service problems of the army and navy, I propose the following:

1. that the deputy ministers of defense of the USSR, the commanders of military units... commanders of forces, groups of forces, fleets, armies and flotillas, commanders (chiefs) of troop arms and chiefs of main and central directorates of the USSR Ministry of Defense study the state of financial and management activities of subordinate troops (naval forces), work out and implement measures to improve the material-technical and financial support of the army and navy in the nation's difficult economic and political situation;

—that matters of logistical support for the troops and naval forces be decided in close interaction with the corresponding republic and local agencies of authority and control, and with enterprises and organizations of the national economy, while strictly observing laws in effect in the USSR and the republics.

2. that sources of self-financing be expanded for military units, installations, military training institutions, enterprises and organizations of the USSR Ministry of Defense, for which purpose we should:

—authorize military units, installations, educational institutions, enterprises and organizations of the USSR Ministry of Defense financed by the budget-estimate method, to conclude independent contracts to provide jobs and services for outside consumers when there is no detriment to the combat readiness of the troops (forces) or their regular combat training; to specify that profits earned by performing such jobs and services, after payment of taxes and other deductions, are to be placed entirely at their disposal to be used by them independently for production and social

development and for material incentives for the workers directly engaged in the performance of these jobs and services;

—increase the volume of transport services, combine the combat training more fully (including that of the military transport and transport aviation) by rendering transportation services for interested organizations and establishments and for the population; allocate transport assets for the centralized transportation of national economic freight, as well as transport operations performed as training missions; authorize military communication agencies to plan the shipment of property and equipment of military units and installations to be sold in the national economy;

—enlarge the authority of commanders of military units to conclude contracts directly with enterprises, sovkhozes, kolkhozes and private parties for the procurement of potatoes and other vegetables; to make maximum use of land assigned to the USSR Ministry of Defense for raising potatoes, other vegetables and products to meet the needs of the armed forces; interact more thoroughly with civilian agricultural enterprises in the use of their land, and exploit other possibilities for producing food for the USSR Ministry of Defense;

—make more efficient use of the production capacities of enterprises and organizations of the USSR Ministry of Defense for enlarging the production of consumer goods and providing paid services for the public, with the condition that they completely fulfill mandatory orders for the delivery of goods (performance of services) for defense needs.

3. take urgent steps to mobilize all available resources to prepare the infrastructure of military posts and garrisons well to function under winter conditions; accomplish the procurement of potatoes and other vegetables fully and in an organized manner....

4. continue the sale of technical military equipment and other materiel to the national economy; make active use of capabilities of the Innovation Center of the USSR Ministry of Defense for centralized control of the processes of transfer, sale and use of all freed assets; have the deputy USSR minister of defense who is chief of rear services of the armed forces of the USSR, prepare proposals on the procedure for selling military assets in 1992.

5. grant authority to commanders of military units and chiefs of installations, military training institutions, enterprises and organizations of the USSR Ministry of Defense financed by budget estimates to establish for blue- and white-collar workers wage and salary rates within the limits of the established wage fund without being bound to the medium wage fund for authorized positional rates based on prescribed manning levels (personnel tables), and incentives and bonuses without ceilings.

6. authorize commanders of military units and chiefs of installations, military training institutions, enterprises

and organizations of the USSR Ministry of Defense to leave budgeted funds remaining at the end of the year in the subunits covered by the estimates to be used for their direct purpose in the new budget year.

7. have the deputy USSR minister of defense who is chief of rear services for housing and billeting of the armed forces of the USSR, the deputy USSR minister of defense for armaments and the chiefs of main and central directorates prepare proposals for the government by 1 January 1992 for altering the procedure for utilizing the money from savings on materiel and energy and for awarding bonuses to the personnel.

8. have the deputy USSR minister of defense who is chief of rear services of the armed forces of the USSR, coordinate with government agencies the matter of issuing free food rations to officers not authorized to receive food provided at state expense, beginning on 1 January 1991.

9. have the General Staff of the armed forces of the USSR, jointly with the rear services of the armed forces of the USSR and the Finance Directorate of the USSR Ministry of Defense, prepare a petition to the government of the USSR to authorize the USSR Ministry of Defense to engage in independent foreign economic activities.

10. assign oversight over the implementation of this directive to the deputy USSR minister of defense who is chief of rear services of the armed forces of the USSR.

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Rail Transport of Hazardous Freight

92UM0798B Moscow TEKHNIKA I VOORUZHENIYE
in Russian No 12, Dec 91 pp 10-11

[Article by Col L. Kovtun: "Shipment of Hazardous Freight by Rail Transport"]

[Text] GOST [State Standard] 19433-88 classifies freight in nine categories, depending upon the type and degree of danger: explosives; compressed, liquified or dissolved gases under pressure; highly flammable liquids; highly flammable solids; self-igniting substances and substances which give off combustible gases when interacting with water; oxidizing substances and organic peroxides; toxic and infectious substances; radioactive materials; caustic and corrosive substances; other hazardous substances. Personnel engaged in transporting them must precisely observe safety measures and the transport procedure and conditions, and must have a solid knowledge of the rules for dealing with emergencies. An emergency is the combustion, leakage or spillage of a hazardous substance, or damage to the container or the rolling stock carrying hazardous freight, which could result in an explosion, a fire, poisoning, burns or illness to people or animals.

Cars of the USSR Ministry of Railways as well as cars and special containers belonging to the shippers (or

recipients) are used for transporting this category of freight. The freight may only be hauled on open rolling stock if this is specified by the standard and the technical specifications for the specific item. The type of rolling stock making up military trains is determined by the military unit shipping the freight.

The special outfitting of cars, as well as materials for securing the freight and preparing the cars for shipments (boards, racks, partitions, grates, soft padding—felt and canvas) are provided by the shipper, regardless of who owns the rolling stock.

It is permitted to transport hazardous freight which is a part of a serial on open cars in tanks, self-propelled artillery pieces, artillery prime movers, armored personnel carriers, tank trucks, special containers and vessels, inside motor vehicles and brake-equipped trailers, as well as on transporter trailers and semitrailers in multiple truck and trailer rigs if the entire multiple trailer rig is located on a single unit of rolling stock. If, however, it is located in the bodies of motor vehicles or brake-equipped trailers or on transport trailers or semi-trailers in multiple truck and trailer rigs, it must be in packing specified by the standards or technical specifications. It is not permitted to transport weapons, military equipment or transport vehicles above car couplings.

The design and the parameters of special containers intended for hauling specific kinds of freight must conform to the standards or technical specifications and must not only protect the freight against damage but also assure its safe transportation.

The shipper bears responsibility for the consequences of not determining the correct type of rolling stock or container for hauling freight, as well as for improper loading or securing of the freight or failure to prevent explosions.

Freight in special containers which do not conform to the universal requirements with respect to type and parameters may be hauled on open rolling stock only when accompanied by specialists or a guard.

Hazardous freight is transported according to shipment plans in individual cars, groups of cars or routed lots as part of freight trains, ordinarily from one shipper to a recipient.

It is permitted to transport small quantities of hazardous freight in an open car from one shipper to several recipients with multiple unloading and reloading en route when accompanied by distributors from the shipper, who are responsible for the direct delivery (or receipt) of the freight. Freight may be loaded on a single car for one railway or for no more than three connecting railways if the stations of destination are all on the same route. Additional freight may be loaded onto the car only at stations where batches of the freight are off-loaded and only for those stations for which the rest of the freight on the car is destined.

The possibility of joint shipment of different hazardous cargos in one car or in various containers on a single car is decided in accordance with the Collection of Regulations on Shipments and Tariff of the USSR Ministry of Railways. They may not be shipped together in a single container (except for freight making up a complement).

The transportability, preservation and safety of hazardous freight and the security, strength and good repair of the packing must be verified when the freight is readied for shipment. In accordance with GOST 19433-88 each unit of freight and the transport units must be marked.

The shipper submits loading requisitions in writing to the chief of the railway division and the commandant of the railway section and the station at least three days prior to the beginning of the 10-day period. He must submit a separate railway bill of lading for each car to the departure station 24 hours prior to loading. One bill of lading is compiled for the entire train or group of cars for hazardous freight shipped by military trains or in groups of cars accompanied by specialists or a guard. The following is indicated on it in handwriting or with a stamp: "Toxic Substances," "Not to Leave Track Area," "Accompanied by Specialist (Military Guard)." The number is written or the accompanying emergency chart is indicated beneath the contents. The chart lists the properties of the hazardous substances, their danger with respect to fires and explosions, their danger to people and animals, and specific safety measures to be observed when dealing with emergencies.

Clean cars in good repair (their regular maintenance date must not have elapsed) are provided for the freight. The technical state and suitability of the cars for transport are determined by the shipper. Military units, installations, enterprises and organizations which regularly ship out or receive hazardous freight must have spur tracks with proper warehouses, hoisting and conveyance equipment. Loading and unloading sites are provided with lighting necessary for round-the-clock operations. The recipient is required to receive cars carrying explosive substances on a spur track within two hours of the time they arrive at the station.

All types of loading and hoisting equipment (wheelbarrows, dollies, skids, roller conveyors, winches, cranes, battery-driven loaders) must be in a state of complete repair and not generate sparks when struck, and those for which this is indicated must have devices or structures preventing the freight from falling.

During the technical inspection and repair of cars it is forbidden to use open-flame devices (torches or wicks) kerosene or candle lamps for lighting. Battery-powered or battery-type electric lights should be used. They must not be switched on or off inside a car containing hazardous freight. It is also forbidden to smoke there.

After cars are loaded the doors are tightly closed, the door fastenings are secured with wire clasps and sealed with the shipper's stamp. A special agent in charge

oversees the loading and unloading. If the shipment is to have a military guard, when the loading is completed the shipper releases the sealed cars to the guard or transport chief with an inventory made out in three copies.

Separate inventories are compiled for each recipient for cars destined for a single station but for different recipients.

Prior to releasing cars containing hazardous freight to the safekeeping of the guard or the chief of transport, or to specialists accompanying the freight, the shipper briefs them in detail on the special requirements for guarding the cars while en route and at stops, on fire safety measures, the procedure for covering cars containing hazardous freight, and personal safety measures. In addition, he instructs guard and escort personnel on the rules for giving railway workers access to the cars for manual inspection or repair, and on the established signals and the procedure for giving them, should the train have to stop.

Hazardous freight may be shipped by rail in individual cars or groups of cars, as well as on entire trains, in which case proper cover must be provided. Empty cars or cars containing nonhazardous freight are used for this purpose. The security or escort is provided by specialists or military security (or paramilitary guard) sentries. They are provided with instructions for escorting the freight, with emergency charts and with individual protective gear, first-aid, fire-extinguishing and signaling equipment, battery-powered electric lights & tool kit, a supply of stuffing material and accessories for repairing crates, rolling stock assemblies and containers, and with additional decontamination means when transporting toxic substances or items or contaminated items.

While en route and at interim stations it is forbidden to uncouple cars carrying hazardous freight from the military trains or from groups of cars escorted by a military guard or specialists. The entire train (or group of cars) is held up for making repairs or transferring freight to good cars.

In case of a danger to the train (a fire, skidding, a broken axle, derailment) or an emergency with the hazardous freight itself, members of the security team or the escort and rail transport workers receiving, dispatching, passing or servicing the train must do everything possible to rectify the situation.

Sites are selected for halting the train which would keep the effects from combustion of the freight to a minimum and would prevent damage to tunnels, bridges, station buildings, warehouses and rolling stock on the tracks.

In the case of a derailment or damage to the cars, a determination should be made as to the possibility of and the conditions for further movement of the freight on the train and maneuvering, steps should be taken to prevent outsiders from entering the danger zone, and the situation and safety measures should be reported: on stages between stations, to the engineer; at a station, to

the duty officer. If there is a large quantity of hazardous material in the emergency zone and there is a danger to the local population or of contamination of the area, railway workers report this to local soviet agencies and to the oblast civil defense headquarters, and summon rescue services and specialists to the accident site from nearby enterprises. When special and fire-fighting forces arrive at the site of the occurrence, those in charge are informed of the state of the freight and the rolling stock, and on safety measures to be followed in the performance of restoration or rescue work.

If a fire is discovered on a car containing hazardous freight, the train is halted. The burning cars are then uncoupled with all haste and removed to at least 300 meters from the rolling stock, after first securing the rest of the train in place. The job of extinguishing the fire is then begun. It should be borne in mind that fires on cars containing toxic substances are fought only in special protective clothing and oxygen-filtration masks. The existing situation must always be borne in mind when taking any steps to deal with emergencies involving hazardous freight. The precautions indicated on the emergency chart absolutely must be observed.

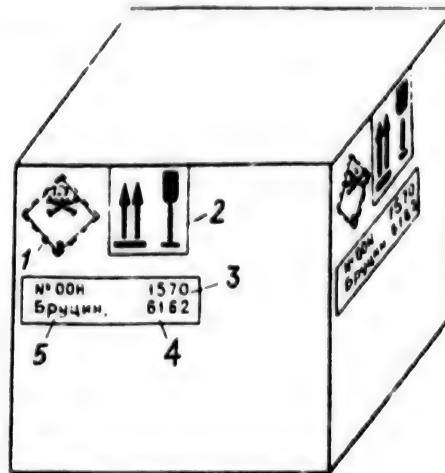
The procedure and the conditions for moving hazardous freight by rail must be strictly observed to eliminate accidents. The obligations of those in charge and their instructions with respect to readying transport equipment for hauling and training military guards for their security should be updated periodically. Interaction with military communications, rail transport and fire inspection agencies should also be improved. It is a good thing to work out long-term plans of measures to ensure and enhance transportation safety. Only the comprehensive resolution of all these problems will make it possible to fulfill military transportation plans on schedule and without accident.

Notes: 1. The square on the crate and the transport packet must be at least 100X100 mm (this may be reduced to 50X50 mm if the size of the container does not permit the application of one of this size), and at least 250X250 mm on a container and on the hauling unit. Its border, outlined in black, is 5 mm from the edge of the symbol.

Danger symbols are hypothetically divided up into two triangles with a horizontal diagonal. The danger symbol for the class (or subclass) is depicted in the upper triangle of main and additional hazard markers, except hazard markers for freight in subclasses 1.4 and 1.5, for which the number of the subclass is indicated instead of the danger symbols.

A legend (in Russian—in English, French or Spanish for exports) describing the type of hazardous freight is applied along the hypothetical diagonal of main and additional danger signs (except for Class 1). The number of the class to which the freight belongs (subclass number for Class 5 freight) is indicated in the bottom corner of

Arrangement of Marking Describing Transport Hazard on a Unit of Freight



Key:

1. Danger symbol
2. Handling symbols
3. UN serial number
4. Classification number
5. Type of Freight

the main sign. The number of the subclass, the compatibility group and the class number are indicated in the lower corner for subclasses 1.1, 1.2 and 1.3.

2. The type of freight being transported, the UN serial number, the classification number in the triangle and the triangle itself are not indicated for hazardous freight in Class 1 for shipment within the Union. Instead, a conventional number from the "List of Class 1 Hazardous Freight" is applied in an equilateral triangle with 15-cm sides (which already contains the category number).

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Difficult State of Transcaucasus MD Rear Services

92UM0854A Moscow TYL VOORUZHENNYKH SIL
in Russian No 12, Dec 91 (signed to press 8 Jan 92)
pp 33-35

[Interview with Deputy District Commanding General for Rear Services Major-General L. Baranov by TYL VOORUZHENNYKH SIL correspondent Lieutenant Colonel A. Uzhevov under the rubric "Military Economics": "At the Hot Spots in the Transcaucasus"]

[Text] Anyone who has been attentively following the energetic development of the situation in the republics of the Transcaucasus can well imagine that all of the contradictions that are arising among them and in them are a triple burden on the soldiers of the Transcaucasus Military District [ZakVO].

Our correspondent asked Major-General L. Baranov, deputy commanding general of the district for rear services, to talk about rear support for the troops under these conditions.

[Correspondent] I know it is impossible to talk about the events of recent days without pain, anger and indignation. Please comment on them nonetheless.

[L. Baranov] Tragic events that really pain the soul. A KamAZ truck on a freight run was stopped right in the daytime in Tbilisi, within the city limits. The driver and expeditor were literally thrown from the truck by armed people, who then got away in an unknown direction. Nine vehicles were later stolen from the impoundment yard of the VAI [military motor-vehicle inspectorate]. Searches for them brought no results. And finally the worst of all. At night a group of about forty people with automatic weapons penetrated onto the grounds of a military installation and took possession of nine vehicles. Major Vladimir Nikolayevich Berilov tried to reason with the raiders and stop the theft somehow. The reaction was merciless—he was shot point-blank. And that was in front of his wife, who begged the bandits for mercy, invoking everything holy... How I would like those who are managing high policy to look into the eyes of the officer's wife and child! How will they live now, how will they carry the memory of the black November of 1991 in the once hospitable capital of Georgia?

The commanding general of the ZakVO, Colonel-General V. Patrikeyev, met with the president of the Republic of Georgia and transmitted a declaration by the officers of the district that reflected profound alarm on the score of the development of the situation in the capital and the republic overall, along with indignation that the bodies of law and order are not offering determined opposition to the armed formations.

The president of the Republic of Georgia expressed condolences to the family of Major V. Berilov, and gave assurances that all steps will be taken to capture the criminals.

[Correspondent] But the government of Georgia, after all, has adopted an official declaration in which it called upon the soldiers of the district and the border and internal-service troops to remain calm and confident—their rights will be observed, social protections will be assured...

[L. Baranov] Those words really are there—at the end. The beginning talks about the fact that the commanders of formations and units responsible for military matériel should take all necessary steps to curtail attempts at its illegal seizure. The matériel thus moves to the forefront, with the fate of people hanging in the air... And while the Cabinet of Ministers is negotiating with representatives of the center and drawing up agreements and treaties, the "privatization" of military hardware is proceeding apace. I will cite just two figures—about 900 vehicles have been lifted in the district overall, of which 50 have been found and returned. Think about this—the local

authorities, apparently, are unable to stand on guard for the law, while the armed formations that have tasted impunity are getting more and more of a taste for it and stop at nothing.

I would note for the sake of fairness that some workers in law and order are able to do a great deal when they want to. Say that same vehicle is stolen, and the police say to make out a report. But what help is that? The division has two pistols and two vehicles standing idle—there is no gasoline. And on the part of the armed formations there are, as is well known, automatic weapons, machineguns, even artillery pieces! And the quota of combustibles is unlimited. How can you contend with that?

[Correspondent] This element clearly cannot fail to be reflected in the economy, and it will overwhelm and undermine established business ties. And I have nonetheless had occasion to hear the opinion that the rear services of the ZakVO are hoping more for help from the center without realizing its local opportunities...

[L. Baranov] Well, an understandable reproach. But let us not give way to emotions, but turn rather to the facts—which, as is well known, are stubborn things.

A large quantity of foodstuffs for the troops of the district used to be procured right here in the republics of the Transcaucasus. Now the shelves of the stores here are half empty, and the prices really "sting." Even in Tbilisi, of which you will soon be convinced. One reason is that the other republics, Russia included, are making far from their complete volumes of deliveries. The local authorities love to remind you of that when they are giving reasons for their own refusals. All of this is so. But we must not forget other reasons as well.

The deliveries are ailing because the republics of the Transcaucasus have a large indebtedness in paying for the foodstuffs that were sent to them before. And the earthquake in Georgia? The stricken regions, by order of the president, were supplied with everything necessary first and foremost. And that is correct. There are shortages of gas and electric power, as a consequence of which some enterprises are temporarily not operating, and the workers have been given leave for one to three months. The railroad to Georgia and Armenia has been blocked, which also threatens supplies. Raw materials are lacking for the production of pasta products, coffee and tomato paste.

Finally, the negative attitude toward the military on the part of the local authorities is evident. Instances where foodstuffs intended for the troops of the district have been sent into the city trade network, public-catering cafeterias, cafes, bars and restaurants, as well as the market, are not isolated. Allocations of hundreds of tons from 27 suppliers have currently not been realized. Is any comment really needed here?

The commanding general of the district, by the way, met with the presidents of Georgia and Azerbaijan and asked

for help in the procurement and dispatch of food for the troops of the ZakVO. The help was promised, but the practical realization has been dragged out. The representatives of the district rear services who have gone to the Ukraine and Byelarus have in turn run up against the same problem. The reasons for the refusals included a ban on the shipment of food outside the borders of the republics, a shortage of railcars, the bad harvest and a shortage of shipping containers. In short, they do not want to deal with the Transcaucasus.

Or take personal effects. The Stepanavan Mill was supplying mittens, and they stopped right before winter. Their colleagues in Tbilisi had switched over to the output of uniforms for the national guards and had unilaterally curtailed the contract with the ZakVO rear services. The situation is the same in Baku. And once again we must note for the sake of fairness that sometimes they simply cannot fulfill the contracts even when they want to—say we are requesting sheets from a mill, but Ivanovo unexpectedly stopped supplying the material for them. It comes full circle...

The situation in the district could be compared to the front lines. The deliveries of bread from the city bakeries is curtailed—you deploy field bakeries. The electrical-transmission lines are blown up—we buy diesels. Individual subunits are blocked off—we prepare food with the aid of field kitchens. The food stores are completely empty—we have to resort to extreme measures, making partial use of the untouchable reserves. The discussion here is not now about some broad assortment—it is just to live! We cannot provide full-fledged food even for the patients in the hospital after a major operation.

We will simply be unable to manage under these conditions without the use of the reserves of the center in the interests of the district. The central food and matériel directorates are helping us substantially, seeking out opportunities and meeting us halfway in the PrikVO [Carpathian MD], PurVO and BVO [Byelorussian MD], even though the situation there is also serious to the utmost. Aircraft deliver cargo to the Transcaucasus and head off to support the troops “on the run.”

The bringing up of matériel, if we were to take the district overall, is unbelievably complex. Only air connections have been set up with the Nakhichevan garrison, for example. The lion's share of the deliveries used to be taken by rail, but now trains with freight are being stopped, they are an easy target for the armed formations. The most reliable, of course, is air transport, but it is simply unable to replace the entire freight flow.

[Correspondent] An extreme situation usually requires the manifestation of special qualities. A rear-services specialist probably cannot get by without selflessness?

[L. Baranov] I am afraid that one cannot get by under ordinary circumstances without it either. God himself commands it here. Even though to some these words may seem stilted. Simply serving in the Transcaucasus Military District requires that today. Officers P.

Shcherbakov, A. Atlaskin, A. Yeseyev, V. Igonkin, V. Zleyayev, V. Nikulushkin and many others are withstanding all of these trials with honor. Sometimes their labor may go unnoticed, but the fact that the soldiers are clothed and kept warm, that they are fed, they feel to be their best reward.

One also cannot fail to say good things about those who provide the soldiers with everything that is needed right among the troops. The bringing up of foodstuffs and matériel, after all, must be sometimes be accomplished under fire, repelling the attacks of the armed formations. The roads, I would note, are not only fired upon but are mined, and the railroad tracks are torn up. The Tskhinvali, Stepanakert and Sumgait garrisons and the guard posts on the borders of Armenia and Azerbaijan are evoking particular alarm. Afghan experience is unfortunately handy here—columns with freight proceed under guard of a squad with automatic weapons and under cover of armored personnel carriers. Lieutenant Colonel V. Fradkin and Captains V. Zozula and E. Selekh have had to lead such columns many times. There are sheepskin coats, fur mittens and felt boots at the guard posts thanks largely to their concern, and the necessary stockpiles of food have been created.

We also do not forget that the majority of the subunits and units in rear services have to perform their mission with reduced personnel—that is, in the face of our already more than modest regular staffing levels. And they manage nonetheless...

[Correspondent] It would be reasonable to ask—at what price? Is this always “working till worn out” and over-stress, or is the prevailing situation bringing to life new forms of operational organization?

[L. Baranov] “We do not spare the price,” says the song that we were singing with great enthusiasm not so long ago. The times are different today. But a military collective, if it is a cohesive one, if it is welded together by a unified will, is able to do a great deal. Take the truck battalion commanded by Major M. Kykin. Three freight and one light vehicle in all. There are moreover not enough batteries or spare parts. And nonetheless, utilizing the existing manpower and equipment, the truck battalion has been making all deliveries on time. Solid rear services and the dedicated efforts of Captain A. Belyanin and Lieutenant A. Storozhok have played no small role in this. A comprehensive subsidiary farm been created through their efforts whose significance is difficult to overestimate in the face of today's shortages. The procurements of potatoes and vegetables in the fall have been made in full in the truck battalion. They are thoroughly prepared for winter here—they have checked out the heating system, replaced some batteries and pipes and winterized the doors and windows.

Now I will answer your second question, on innovations. They have leased the pigpen to local animal breeders in that same truck battalion. The gain is mutual—a specialist is running things, and the soldiers in the unit can

be put to work at a different rear facility. Or another problem—where to get a detail for the mess?

[Correspondent] But isn't there a corresponding order from the minister of defense, after all?

[L. Baranov] That may be so, and the commanders of the units are forced to put 1-2 men on the detail for the soldiers' mess instead of the 6-8 under the standards—there are not enough personnel, we are undermanned. Civilians were brought in to work in the mess as an experiment in some units, by request. These were usually poorly off people wholly satisfied with the purely symbolic wages and the food at that same mess. Practice shows that they can successfully handle the clean-up of the facilities, washing dishes, preparing potatoes and vegetables. What is the way out of the situation? I know that it is just as acute a problem to form up the mess detail in other districts as well. Perhaps our experience will be useful...

[Correspondent] The best human qualities, remembering Afghanistan, are confirmed and manifested in an extreme situation. It is intolerable at the same time when people detect other qualities—a desire to gain from it, for example.

[L. Baranov] Instances of theft and sale of foodstuffs through cooperatives have become a reality in some military units. The misfortune of others is pennies from heaven to some. Warrant Officer Sh. Kepuladze was short ten tons of sugar in the warehouse. He deposited the value of it with the cashier—at state prices, to make up the shortfall. The market value of the sugar is almost a hundred thousand rubles more! It obviously makes sense herein to review the prices and recover for shortfalls at the real prices. Theft would become less, I am sure.

Or here is another example. Senior Sergeant S. Yashnik stole and sold ammunition. Being proved guilty of this, he "broke into a run": I cannot, he said, take part in ethnic conflict any longer. But earlier, when he was figuring out how to get into his "business," he was telling his subordinates something quite different—we are protecting against bloodshed! A chameleon, that's all.

The majority of the rear-services specialists, of course, are striving to perform their duties in a worthy manner and not permit the theft or pilfering of military property. Some officers, like Major V. Berilov, did not spare even their own lives in that.

[Correspondent] There was information in KOMSO-MOLSKAYA PRAVDA on the construction of housing in Stavropol for the generals of the ZakVO. How much does that correspond to reality?

[L. Baranov] The commanding general of the district has called that notice hypocritical and instigatory. There really is a construction project underway—but it is in the interests of all the officers in the district. The Afghan veterans discharged into the reserves and those who took

part in cleaning up the consequences of the accident at the Chernobyl AES [nuclear power plant] can count on receiving housing first and foremost. There was no discussion of anything fancy—the construction project is proceeding with great difficulty. Two hundred apartments for the district is, of course, a drop in the bucket. But there are simply no manpower or funds for any more as yet.

[Correspondent] And a final question. We have been talking about the lack of social protections for the officers and warrant officers of the district. What about their families, the "little rear"?

[L. Baranov] There is another closed circle here. There is nowhere for the wives of the officers to work—they are refused hiring even when there are vacant positions. The children cannot attend school—the instruction is only in the national languages. The natural result has been the departure of most of the families to relatives in other republics, to Russia. The mood of no one is raised by the forced bachelor life. The more so if you take into account that pay has not been issued for several months—the banks of the republics in the Transcaucasus are holding up the payments by every means possible.

[Correspondent] But shouldn't something change for the better—it cannot go on this way forever?

[L. Baranov] Now is just the time to recall the boundless patience of the great Russian people. Yes, the person in military uniform can withstand a great deal if he understands that he need only leave his post and an undeclared war will burst out again in an evil flame and blood will flow in rivers. Hundreds and thousands of lives of peaceable inhabitants on various sides of the border have been saved today. The highest price has been paid for that. But the patience of people is not boundless all the same.

From the editors: As this material was being prepared for press, it became known that the Presidium of the Supreme Soviet of Adzhariya allocated the sum of 100,000 rubles for the family of Major Vladimir Berilov, killed in Tbilisi, and designated a lifetime pension for the son of the deceased.

The chairman of the Presidium of the Supreme Soviet of Adzhariya, Arslan Abashidze, has invited the widow of Major Berilov to take up permanent residence in the city of Batumi and has promised to provide them with housing. God grant, as they say, that this will serve as the resurrection of friendship between the army and the Georgia people.

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40 Motor Vehicle Battalions Detailed for Spring Sowing

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[Interview with Major-General Sergey Markovich Bogomolov, who headed the motor vehicle battalion headquarters during last year's harvest, by an unidentified KRASNAYA ZVEZDA correspondent, under the rubric: "Harvest-92": "We Are Once Again Preparing for 'Battle'"]

[Text] On the last day of February, Russian Federation President B.N. Yeltsin signed the Decree "On Measures for the Organized Conduct of the Spring Sowing and Harvest in 1992" in accordance with which they propose allocating 40 motor vehicle battalions, that is, 20,000 motor vehicles with drivers, for participation in harvest work in the fields of Russia.

Our correspondent visited Major-General S. Bogomolov, who last year headed the headquarters for the motor vehicle battalions that were involved in the harvest, and requested that he answer a number of questions.

[KRASNAYA ZVEZDA] We all know that today many military units are experiencing difficulties with personnel manning and that there are not enough specialists, including drivers. Are they managing to fully man motor vehicle battalions in this situation?

[Bogomolov] No, we are not fully manning all battalions with drivers by using compulsory service personnel alone. Therefore, during the period of the extra work at harvest time, we have decided to call up reservists to these battalions from those locations where we have to form motor vehicle battalions. In our opinion, this work will be successful only with the active participation of the Russian Federation republic Councils of Ministers, the organs of executive power of krays, oblasts, autonomous formations, Moscow and Saint Petersburg, and with their constant cooperation with the CIS [Commonwealth of Independent States] Allied Armed Forces Main Command.

[KRASNAYA ZVEZDA] Sergey Markovich, obviously preparatory work is being conducted already right now?

[Bogomolov] It certainly is. Selection of personnel and preparation of vehicles has already begun in the troops. We are preparing assemblies with the leadership of the Armed Forces services, military districts and fleets, commanders of operational groups, and battalion commanders who will directly participate in gathering the harvest.

[KRASNAYA ZVEZDA] During the period of preparatory work, you are certainly analyzing not only everything that was good this past year but also the problems which you had to solve at that time?

[Bogomolov] You are correct. We actually did not get by without serious shortcomings at that time. Of them the most painful—was simple motor vehicle transportation. KRASNAYA ZVEZDA wrote quite a bit about the fact that from 30 to 50 percent of the motor vehicles in some oblasts stood idle. We still have two more numbers. Last year, on the average each motor vehicle stood idle for up to 15 days prior to the initiation of the harvest from the moment of arrival on site and—23 days—after its completion and until departure for the unit.

[KRASNAYA ZVEZDA] In your opinion, just what are the causes of these idle times?

[Bogomolov] First of all, some local leaders attempted to acquire as many motor vehicles as possible without thinking beforehand about how to rationally utilize each of them and to support, as we are accustomed to saying it, the work front. The lack of gasoline also played its role during the hottest days of the hard work during the harvest. Local leaders did not always effectively carry out the maneuvering of motor vehicles.

[KRASNAYA ZVEZDA] Sergey Markovich, it seems that this also affected the financial aspect of the matter?

[Bogomolov] Of course. The battalions found themselves without money at the end of the first month of work last year. As a result, an additional sum of 22 million rubles was allocated for the maintenance of the motor vehicle battalions, including R10 million at the expense of the Armed Forces.

On the average, expenditures for one motor vehicle battalion totaled R2 million, at the same time that battalion personnel earned R830,000.

[KRASNAYA ZVEZDA] And what is being done so that this sad experience is not repeated?

[Bogomolov] Right now the Armed Forces General Staff jointly with the Russian Federation Ministry of Agriculture is developing a "Regulation on the Utilization of Armed Forces Motor Vehicles That Have Been Brought In To Transport Grain and Other Agriculture Products During the Harvest Period." It defines military motor vehicle utilization procedures and it regulates the most advisable forms for organizing motor vehicle subunit operations to transport grain and other agricultural products. The regulation defines reciprocal billing procedures for transport movements carried out, delays, and the resolution of conflicts between military personnel and the leaders of the farms.

While considering the experience of past years and the socio-economic situation in the Russian Federation, the CIS Allied Armed Forces General Staff has determined as one of the primary missions for harvest 1992—to strive so that motor vehicle battalions that are directed to gather the harvest are profitable.

With this goal in mind, we plan to shift from command-administrative methods for the management of motor vehicle battalions to their participation in gathering the

harvest on a contract basis, the essence of which consists of concluding contracts both between motor vehicle battalions and agricultural enterprises and organizations and also between the branches of the Armed Forces, military districts, fleets and republics, krays, and oblasts.

Construction Officer on Difficulties Facing Apartment Construction

*92UM0885A Kiev NARODNAYA ARMIYA in Russian
4 Apr 92 pp 1, 2*

[Interview with Lt Col A. Mamonov, chief of a work supervisor's section, by Vasiliy Goshko, NARODNAYA ARMIYA correspondent, under the rubric "A topical Interview": "We Build Housing Under Difficult Conditions"]

[Text] **The 70th UNR [Work Supervisor's Section] is the official name of the collective of military construction workers headed by Lt Col Aleksandr Mamonov. It numbers slightly more than 700 highly skilled specialists capable of performing the most difficult jobs well. Those related to the housing problem, among others, which can without exaggeration be called the most important problem today.**

There is another thing, however: today's exorbitant prices. How is their rapid increase affecting the performance of the military construction workers? How is the organization finding a way out of the situation despite all the difficulties? Our correspondent asked Lt Col A. Mamonov to answer these and other questions.

[Goshko] Aleksandr Iosifovich, I know that in the recent past your UNR was in first place among related organizations almost every quarter over a period of many years. What is the situation now?

[Mamonov] Our team developed as a powerful construction unit long ago and has good traditions, of which every member of the organization is proud. We have our "guard," those specialists upon whom one can always count. Thanks to them we do not actually have uncompleted projects. They have built housing not just at a number of garrisons located within the Kiev Military District but also outside the district. It is an interesting fact that there are even developments in Ukraine's capital which we helped to build—Darnitsa, among others.

[Goshko] How are you going to brighten up the lives of servicemen without apartments this year? Incidentally, are there many of them in Kiev?

[Mamonov] In the first place, with the fact that we are building basically only housing. In the second place, the distribution has developed well for us. What do I mean? Just where did our work not take us in past years? To Lugansk, Krivoy Rog, Cherkassy—even, imagine, to Moscow and Leninakan. The personnel were always on temporary detached duty assignments, frequently separated from their families. Not everyone liked this. The situation is different now. The construction work is at

Kiev, Borispol, Devichki, Desna and certain other garrisons. We are actually working at home, figuratively speaking, or right nearby.

I also want to stress the following fact. The housing program has doubled in size. Last year, for example, we released 16,000 square meters, whereas the figure has now leapt to 33,000. In the first quarter we released a building on Krasnovezdny Prospekt with 94 apartments. People are already moving into them. We are about to release for occupancy a 40-apartment building near the Reinforced Concrete Products Plant. Our workers have assembled ten smaller, 8-apartment buildings in Russkaya Polina near Cherkassy.

[Goshko] And what does the future hold?

[Mamonov] Construction of a 54-apartment building on Turgenevskaya Street is in full swing. Other projects have also been started: at Darnitsa, for example—also for a reinforced concrete products plant (own construction), and a 90-apartment building each at the Desna and Devichki garrisons. We have begun the construction of apartment buildings of the Mobil series for the first time this year, on Kurskaya Street. It is planned to release one of them, 40 apartments, for occupancy by the end of this year. If things go as they should, the Kiev authorities are apparently going to allow us to build housing for servicemen in the central areas of the city.

[Goshko] And you are doing all of this with your own capacities?

[Mamonov] Basically, yes. I put it that way because Kiev Housing Construction Combine No. 1, headed by Aleksandr Afanasyevich Yermakov, is joining us as a subcontractor this year. The piles are already being driven for three 79-apartment buildings. And so, it is planned for the URN to build 660 apartments, but at various garrisons. It seems to me that this is quite a bit for one organization.

[Goshko] That is a lot of work, without a doubt. And it seems to me, Aleksandr Iosifovich, that it would not be wrong to say that your construction workers are the very best, as in the past.

[Mamonov] Yes, the people deserve this. As the one in charge I would like to put in a good word for section heads Vladimir Nikishino and Vladimir Strigul, finishers Valentin Semenyuk, Nikolay Derek and Eduard Chubik, carpenters Nikolay Dikiy and Vasiliy Lenko, brigade leaders Galina Kazakova, Nadezhda Khaylak and Zoya Chekh, and many others. They are that "guard" which are at the forefront, leading the others. They do not complain about the difficulties. They understand the situation which has developed in Ukraine. We are building for the army of a young, independent state, after all.

[Goshko] Now let us move on to the problems of the military construction workers. There are some, are there not?

[Mamonov] There are more problems than one might imagine. The problem of financing the construction has become acute. The existing compensation for construction materials does not cover our outlays. We suffer losses as a result, and this means ruin. We are forced to borrow at large interest rates.

[Gushko] Do you purchase construction materials at contracted prices?

[Mamonov] In most cases. Their distribution from stocks has collapsed almost entirely. In other words, all ties have been severed. The enterprises which supply the materials we agree only to direct contracts or barter. Some of them demand things we do not have for ourselves. We literally have to twist and turn. There is no other way to avoid construction stoppages. Prices are increasing literally by the day. One brick costs R3 [rubles]. It is the same price, just imagine, for a long loaf in a bread store. Which of them embodies more labor, one asks. Where is the logic in such prices? No one forces us to take the materials, however. If we do not take them, someone else will.

[Gushko] Are people leaving the collective?

[Mamonov] In the beginning, when cooperatives were being set up, some people went after the big buck. Not very many, however. The personnel situation has now stabilized though, and there is even an influx. We are at ease in this respect.

[Gushko] Wages are of interest to everyone right now. What are they for the UNR?

[Mamonov] The same as in other collectives, including civilian ones. We are now in a card index, you know. And the cashier sometimes has to go to the bank and wait for our organization's name to light up on a screen.

With respect to specific amounts, each receives according to the labor he contributes. Even today there is no price for a square meter of construction. And the bricklayer's labor differs only insignificantly from that of a miner....

[Gushko] And what steps are being taken to provide social protection for the construction workers?

[Mamonov] This is the question of questions. Last year Aleksey Zhukovskiy, chairman of the trade union committee, and I compiled a plan of measures to implement additional steps to bolster the social protection of UNR workers in connection with the retail price reform. We computed the planned profits and the consumption fund. We increased wages and began regularly paying bonuses for the work results. We revised upward the pay scales for the workers. We are paying for the increased cost of city transport. We provide financial assistance for those going on vacation so that they can stay healthy. We pay a lump-sum amount to help retiring veterans. Last year, for example, we paid R3,000 each to those who had worked from 20 to 25 years in the URN.

In one village in Borispolskiy Rayon the UNR designated land for gardens. There were more applicants than plots. No one was left without an allotment. Let the people work and raise vegetables for themselves. This will be a big help to them.

[Gushko] There is a saying that the shoemaker's wife is the worst shod, and....

[Mamonov] The construction worker's wife is the worst housed. Unfortunately, that is so. We are owed a fair amount of housing. We have been given receipts to prove that the housing would be repaid. No one is planning to do so yet, however. Many of the workers' families are crowded together in dormitories. Their children are growing up, and they need a peaceful environment. The better a person rests, the better he works. This is axiomatic. We shall try to eliminate this problem as well. Fifteen families have already moved into improved housing this year.

[Gushko] The UNR also employs personnel of a military construction detachment. What do the enlisted men do?

[Mamonov] They work right at the construction sites. A total of 250 work in mixed brigades or independently. These young people also require close attention and social protection. The main thing is not to slight them in their earnings and to provide them with all the pay and allowances. And also to teach them construction specialties.

[Gushko] In the situation of transition to market relations will the construction workers not find themselves facing financial ruin?

[Mamonov] There is no simple answer to that question. The times are such that the future is something remote. But let us be optimistic, even though we know that the servicemen need a lot of housing. That is why we exist, to resolve this problem. I repeat: We have a fine collective, modern facilities and equipment, and experienced work sections. The only thing left is to build good housing in these difficult times.

[Gushko] Thank you, Aleksandr Iosifovich, for the optimism and the interesting account of the UNR construction workers. I hope that many servicemen will read this interview, particularly those who are impatiently awaiting apartments. I wish you success in the work.

[Mamonov] Thank you also.

A short postscript:

Our readers should not get the impression that we decided to describe just the best construction workers, as happened in the past, and impress you with what they can do. This is actually the best collective in many respects. The others need to take aim at such as these and find that path which is the most certain, the most reliable today. The housing problem never leaves the agenda for a minute. It is equally important for all the garrisons.

INTERREGIONAL MILITARY ISSUES

Border Troops Chief on Moldova-Ukraine Border Situation

92UM08724 Kiev NARODNAYA ARMIYA
21 Mar 92 p 1

[Interview with Maj-Gen Vladimir Boruchenko, first deputy chairman of the State Committee for Protection of the State Border of Ukraine and chief of staff of the Border Troops of Ukraine, by NARODNAYA ARMIYA; place and date not given: "Border Guards Are Carrying out the Decree of the President of Ukraine"]

[Text] On 17 March, the President of Ukraine adopted the Decree on Measures for Protection of the State Border of Ukraine with the Republic of Moldova, which tasked the State Committee for Protection of the State Border of Ukraine, jointly with the Ministry of Internal Affairs, the Security Service, and the State Customs Committee, with organizing protection of Ukraine's state border with the Republic of Moldova. In this regard, we asked the first deputy chairman of the State Committee for Protection of the State Border of Ukraine and chief of staff of the Border Troops of Ukraine, Major-General Vladimir Boruchenko, to answer a few questions.

[NARODNAYA ARMIYA] What specifically has already been done to implement the Decree of the President of Ukraine?

[Boruchenko] The necessary forces and assets are being transferred in a timely manner to the Ukraine-Moldova border. They will be able to carry out fully their assigned tasks, ensure protection and inviolability of the territory of Ukraine, the safety of citizens, and protection of public order in the areas bordering Moldova, and prevent armed groupings and other border violators from crossing into the territory of Ukraine. To this end, we have established posts of Border Troops, a National Guard subunit, and internal affairs bodies along the entire border with Moldova. Protection of the state border has been organized by dispatching enlarged border guard details, operational troop groups, and mobile posts using armored equipment along the border and on rear approaches to it. In a 50-km special zone, we are taking control of all communication routes from Moldova and inspecting documents and freight.

[NARODNAYA ARMIYA] The decree notes that group trips by citizens of Ukraine and other countries through the territory of Ukraine into the Republic of Moldova are being temporarily suspended. Are there any restrictions on the movement of individuals?

[Boruchenko] They are authorized to cross the border. But it must be kept in mind that citizens who do not have documents will not be permitted to cross the border until the specific circumstances of the entry or exit are clarified. Citizens of those countries which are not part of the Commonwealth of Independent States also will not be permitted to cross the border.

[NARODNAYA ARMIYA] How is the decree perceived by the population of those areas bordering Moldova?

[Boruchenko] Exceptionally favorably. They note the timeliness of measures for introducing special zones in the border areas and also the temporary suspension of group trips across the territory of Ukraine into Moldova. The population approves of the actions of border guards to protect the state border. We are being given comprehensive assistance in billeting and organizing feeding of personnel and creating the necessary conditions for protecting Ukrainian populated areas.

In turn, the border guards understand well that the tasks facing them are of great state importance. Hence such a responsible attitude towards carrying them out.

Stumbling Blocks Ahead of CIS Peacekeeping Force

92UM0848B Moscow KOMSOMOLSKAYA PRAVDA
in Russian 31 Mar 92 p 1

[Article by I. Chernyak: "Where Do We Get the Dye for the Blue Helmets?"]

[Text] The presidents argued for two hours in Kiev and then agreed to sign an agreement on groups of military observers and collective forces to maintain peace in the CIS [Commonwealth of Independent States], a sort of "CIS Blue Helmets." The idea was N. Nazarbayev's, and he is the one who convinced everyone of its importance. The public is satisfied: There is a guarantee of peace!

The functions of the Peace Force were apparently copied out of the statute on UN forces: to participate in the quelling of national conflicts, to separate warring parties, to monitor the observance of a cease-fire, an armistice, disarmament and so forth. These forces will apparently have their own uniform and insignia (the colors have not been thought yet) and will be manned on a contractual basis by volunteers from all the states except warring states. They are to be headed by a Joint Command. Mar Avn Yevgeniy Shaposhnikov, commander in chief of the Joint Armed Forces of the CIS, did not object. He merely modestly requested that these forces be placed not under his command but under the Council of Heads of the Commonwealth States. In exchange the commander in chief promised to help the Peace Force with training, with money and if necessary, with armored personnel carriers.

The presidents liked Nazarbayev's idea so much they began vying with one another in proposing various incentives for the soldiers. Deeply moved, they even proposed paying in hard currency. No one suggested where to get it, to be sure. They agreed to return to the matter at the next meeting in Tashkent.

In the euphoria the presidents somehow failed to notice when Ukrainian Defense Minister Konstantin Morozov announced that his army would be a part of these forces only if Ukraine's parliament approved.

I would point out that at the very least a request by the warring sides would be needed for the introduction of the Peace Force, and they would first have to agree to stop firing at one another. The heads of government of the CIS republics were instructed to prepare proposals on these forces, but no specific dates were named for their submission. The reason was a petty one. The first such "warring parties," Armenia and Azerbaijan, simply could not reach agreement. And that is actually where the Peace Force would be sent.

It seems that the resolution of the problem will drown in the flood of endless manipulating and coordinating, however. It is remarkable that even a confederation of mountain peoples of the Caucasus was ahead of the CIS presidents. Their recent decision to form their own "Blue Helmets" was more specific, indicating the number of subunits and the troop arms.

Apparently Russia's Minister of Foreign Affairs A. Kozyrev himself does not have great faith in the possibilities of the CIS Peace Force. In any case, he recently proposed establishing CSCE [Conference on Security and Cooperation in Europe] armed forces modeled after the NATO structures to restore peace in Karabakh. According to him, most ministers of foreign affairs of the CSCE nations agree with him. It appears that those warring parties themselves will again be the last to be asked for their opinion.

Crimean Officers' Union Created

92UM0871C Kiev NARODNAYA ARMIYA in Russian
31 Mar 92 p 1

[Article by Capt 3d Rank A. Grachev: "Crimean Officer's Union Created"]

[Text] A constituent conference was held in Sevastopol, where delegates from various regions of the Republic of Crimea and military garrisons founded the "Crimean Officers' Union," a public club.

The priority goals of the new public association are: assist in uniting officers based on universal human values and adherence to military duty; ensure economic, social, legal, and moral protection of officers and their family members.

The club is a republic, voluntary, unmilitarized, and unarmed self-governed public association operating on the territory of the Republic of Crimea, where it has branches, including the city of Sevastopol.

The delegates of the conference adopted the charter of the public club and elected supervisory bodies.

The conference adopted an appeal to officers and peoples of Crimea.

UKRAINE

Ukrainian Military Appointments

92UM0867A Kiev NARODNAYA ARMIYA
in Ukrainian 21 Mar 92 p 1

[Decree No. 161 of the President of Ukraine on the Appointment of Army Commanders of the Armed Forces of Ukraine]

[Text]

1. Maj Gen Avn Volodymyr Mikhaylovych Antonets is appointed commander of the 14th Air Army.
2. Lt Gen Avn Valeriy Opanasovych Vasyliev is appointed commander of the 24th Air Army.
3. Lt Gen Mikhaylo Oleksiyonovich Lopatin is appointed commander of the 8th Air Defense Army.
4. Maj Gen Avn Viktor Ivanovich Strelnikov is appointed commander of the 5th Air Army.
5. Maj Gen Volodymyr Mikolayovych Shekhovtsov is appointed commander of the 38th Combined-Arms Army.
6. Maj Gen Volodymyr Petrovych Shkidchenko is appointed commander of the 6th Guards Tank Army.
7. Maj Gen Petro Ivanovych Shulyak is appointed commander of the 13th Combined-Arms Army.
8. This Decree takes effect on the day of its signing.

[Signed] President of Ukraine
L. Kravchuk
Kiev, 18 March 1992

Defense Minister Morozov Interviewed

92UM0838A Moscow VESTNIK
PROTIVOVOZDUSHNOY OBORONY in Russian
No 1, Jan 92 (signed to press 10 Feb 92) pp 6-8

[Interview with Col-Gen Konstantin Petrovich Morozov, minister of defense of Ukraine, by editor in chief of VESTNIK PROTIVOVOZDUSHNOY OBORONY; place and date not given: "We Are Following a Civilized Path"]

[Text]

[VESTNIK PVO] There is no need, Konstantin Petrovich, to argue how complicated the processes associated with military organizational development taking place in Ukraine today are. We have, to put it mildly, an extremely one-sided idea about them. This is why I have turned to you. Our readers want to hear firsthand, as they say, what Ukraine's army will be like, why the need arose to create it, and what is being done now in this direction. But first, tell us about yourself in a few words.

[Morozov] I was born in 1944 in the city of Bryanka, Luga Oblast. My father was a worker. He died at work when I was 10. My mother worked her entire life as a teacher in the lower classes. She is on pension now. I became a military pilot in Kharkov. I later completed the Air Force Academy imeni Yu.A. Gagarin and the General Staff Academy. I have served in virtually all command positions. The last one, from which I was appointed minister of defense of Ukraine, was commander of an air army. I have still not stopped flying. My wife is a historian. We have a daughter. That is probably all. Now about the business at hand.

[VESTNIK PVO] Why has Ukraine undertaken to create its own army in such a hasty manner?

[Morozov] What does "hasty" mean? Not a single legal document concerning the creation of the Armed Forces of Ukraine, beginning with the decree of the republic's Supreme Soviet on military units and ending with the latest laws, was submitted by the people's chosen representatives in, as they say, rough, unfinished form. They have all been worked out with care and thoroughness corresponding to world standards.

If you have in mind the density of our work according to a time scale, then I agree: my colleagues, subordinates, and I myself have been working with greater intensity than is customary in union military structures. I also will not deny the fact that the commission of Ukrainian legislators headed by Comrade V. Durdinets, and my assistants and I were prompted to such a pace of legislative work by the events associated with the August putsch. We all understood that we must not slow down. The union army structure is disintegrating almost with neglect. If Ukraine does not take all the army stationed on its territory under its tutelage and if it does not become a pioneer in the civilized creation of its own armed forces, delay here may result in quite complicated and unpredictable consequences. Of course, different opinions also have been expressed by some of the people's deputies regarding our decisiveness. But the vector was ours. It did not enable anyone to stumble or to pause in indecisiveness on the path of implementing ideas most crucial and fateful for Ukraine.

You see, at the center (meaning Moscow) and in other regions of the former Union, some people still do not realize that there is no longer any force that can stop this state, numbering more than 50 million people, from acquiring complete political and economic sovereignty. How can such a powerful and great country, having vast natural resources and creative, scientific, and industrial potential, manage without its own army?

First Digression

The reader would agree that even now, when practically nothing should surprise us, we perceive discussions about national armies up to now as some revolt, a thing unlawful and terribly destructive at its basis. Having grown up under the banner of the unified, indestructible, and legendary Soviet Army (and in the past it was such).

we all no longer are able to imagine anything different either in theory or in practice. Only a few of us (and the person to whom I am talking is among them) are able not only to think in non-traditional ways about topics of defense organizational development, but also to implement it in practice.

[VESTNIK PVO] Konstantin Petrovich, to be utterly frank, there are very many opposed to the very idea of creating a Ukrainian Army. And they are not only outside the republic. But even this is not the main point. Their arguments are much more important. Here are but a few of them: the lack of a military doctrine and clarity in determining allies and adversaries; questions of material and technical supply and financing have not been worked out. About \$40 billion will be needed to maintain the present troop formations. Where will it come from? How much money will be required for purchasing equipment and armament if even pistols and shells are not produced in Ukraine?

[Morozov] First of all, I will say that we must not brush aside any of these arguments (incidentally, there are many more). We have never and never will close our eyes to the existing complex problems associated with Ukraine creating its own army. But, first, the republic, despite its complex geopolitical situation (there are 735,000 troops of NATO and neighboring states stationed in our possible theater of military operations; they have 56 divisions, 13,000 tanks, about 4,000 aircraft, and 594 warships) and despite all this, Ukraine does not need such a large grouping of forces of more than one million men as exists today. It will be reduced substantially. The headquarters of all the districts will be abolished, and the system of military education will be restructured. (I would remind you that the territory of Ukraine has 33 military higher educational institutions plus the military departments at civilian higher educational institutions.)

Naturally, in time we also will resolve all the problems associated with financing the new military structures. And we are not basing this on speculative desires and conclusions, but on quite accurate calculations and thoroughly substantiated forecasts.

[VESTNIK PVO] How does USSR Minister of Defense Marshal of Aviation Yevgeniy Ivanovich Shaposhnikov react to you personally and to your activities in the post of minister of defense?

[Morozov] We have splendid relations between us on personal terms. The minister congratulated me on my appointment already one hour after I took over the position. As far as Ukraine building its own armed forces is concerned, in my opinion, Marshal Shaposhnikov's position here is not flexible enough. True, it is always being interpreted somehow—from total rejection of the very idea to proposing to create a defensive alliance. Unfortunately, the "big" Ministry of Defense is not taking any practical steps to meet us.

We understand Shaposhnikov's situation (our interview with K.P. Morozov took place in late November of last year—M.Z.). Defending so harshly the unity of the armed forces, he is guided by a specific political guideline. However, the reality is such that neither the president nor the State Council is taking into account the political realities in Ukraine. And they, I repeat, are such that the process of military self-determination in the republic became irreversible long ago. Therefore, it is hard to call constructive a position which rules out a search for mutually acceptable solutions, joint assessment of the situation, and joint consideration of possible variants of solving truly important and not artificial problems. Especially since the Ukrainian side, no matter who claims what in this regard, has still chosen a sufficiently civilized, evolutionary, calm, and weighted path of building its own armed forces based on priority development of a legal base.

Second Digression

One contemporary writer stated this thought: "Thank God that people on whose faces there are signs of intelligence have come to the leadership of our army." In my position of an active-duty colonel, it is difficult to somehow develop such a thought and not be suspicious of considerations of the moment. Although fact remains fact: our present minister of defense as well as the vast majority of his deputies and closest assistants are progressively thinking people who long ago mastered what we call perestroika thinking. Finally, they also know military affairs far better than their unlucky predecessors, who with such ecumenical shame made a mess of the only thing they were still able to do—the putsch. Still, we will be honest and fair: the appointment these certainly capable and in some ways gifted people to the highest leadership posts of the armed forces was hopelessly late. Now even they are unable to stop the breakup of the army, just as the current President and his team are unable to stop the breakup of the Union. The time has slipped by. The trend has gained such force that nothing can stop it now. Fortunately, there are still in the innermost depths of the Army and Navy people such as Morozov who were able to seize the situation in time and confidently keep it under control.

[VESTNIK PVO] I am mentally putting myself in the position of an officer stationed in Ukraine. And I admit to you frankly that it is not easy for me even purely speculatively to define and find my place in the complex events which are now unfolding in the republic. Needless to say, it is a hundred times more complex for specific people in specific circumstances. What are your thoughts about this?

[Morozov] Without oversimplifying the problem in the least, I would still say that the vast majority of officers and warrant officers serving within the republic understand perfectly well that the people of independent Ukraine have a legitimate right to have their own statehood and, accordingly, all its attributes and that the people of Ukraine must be concerned about protecting

their democracy, their sovereignty. So, based on these fundamental positions, I dare assure you that the majority of servicemen have already determined their position.

At the same time, this category of people is so responsible and so feel the need for legal support of their actions that they demonstrate maximum restraint and conscientiously carry out their duties within the framework of the existing military formations. So far there have not yet been any serious excesses in our units and subunits somehow associated with the problems over creating a Ukrainian Army. I hope very much that, in such conditions of restraint and regulation of the acts and actions of military people, we will continue and successfully complete our difficult mission. And it must not be otherwise. I repeat, the majority of the officer corps understand and have correctly assessed the situation at hand. They share the steps being taken by the Ukrainian Parliament and believe that if the entire nation set such a goal for itself, it will still be achieved. And it will be achieved calmly, confidently, without any aggravation, without confrontation, and without stratification of servicemen, i.e., in a civilized manner.

Third and Last Digression

When the idea of a national army first began to be discussed in the mass media, the attitude towards it of the top echelon of leaders of the state and the armed forces was so negative that it seemed there would not be even the slightest change in resolving this problem for the next 100 years. Who of us writing on military topics did not express his negative attitude towards sovereign republic armed forces? In any event, the author of these lines at one time was fairly active in enlightening the mistaken "military independents."

Two or three years have passed, and the utopia became a reality. But even this is not the main thing. Far more important is the astonishing understanding with which those who are serving on the territory of this republic have related to the creation of the Ukrainian Army, and how awkwardly little the policy of the center regarding national armed forces has evolved during this time.

Remember how it was with the Baltic republics. At first they asked only for economic independence. But after encountering a harsh rebuff from the center, they simply left the Union, slamming the door. It is the same picture with the armies. The lessons of history teach us that the lessons of history teach nothing.

[VESTNIK PVO] Konstantin Petrovich, what do you yourself, the republic's top military chief, think about the various unions and associations of officers that have appeared in the large and small cities of Ukraine and in the units and garrisons? Is this a sign of some sort of destruction on which a large or small military organism is based?

[Morozov] I do not view either nihilistically or pessimistically the social organizations in the army ranks and

their desire to defend in every way justice with respect to servicemen and their honor and dignity. Although I understand perfectly well that all these, which until recently we called informal, organizations did not come about because of the good life in the army. This is a natural reaction of collectives to the complexities and vicissitudes of daily life, to the general instability of the political and economic situation everywhere in the country and army. Finally, this is largely a recurrence of our recent past, when any public movement in the army was prosecuted and rooted out.

[VESTNIK PVO] I have a question, Konstantin Petrovich, which I must ask you. What do you think about the fate of the Air Defense Forces in Ukraine?

[Morozov] Ukraine's Law on Armed Forces states that they consist of the ground forces (ground defense forces), air forces (airspace defense forces), naval forces, military educational institutions, railroad troops, and special formations. As we can see, the Air Defense Forces are those forces to which we devote most serious attention (of course, not to the detriment of other branches).

True, there are very many problems here, and they are quite difficult. Let us begin with the fact that the air defense system was created taking into account the forces of the former Warsaw Pact countries. After this pact and the unified air defense system were eliminated, some time was spent on improving the air defense structure from the standpoint of the new territorial boundaries. One also must take into account the fact that the Air Defense Forces receive operational information not only from its own sources but also from other branches of the armed forces. Finally, the Air Defense Forces are highly centralized because they have an integrated automated command and control system.

There are also a number of other problems, but they will be resolved gradually. I do not have the least bit of doubt that Ukraine will be able to create its own air defense system and operate it skillfully and competently. This is especially topical since, as we know, the Air Defense Forces will also undergo serious changes.

[VESTNIK PVO] Thank you.

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Morozov: 'Ukraine Will Never Have Strategic Tasks Beyond Its Borders'

92UM0882A Kiev NARODNAYA ARMIYA in Russian
25 Mar 92 p 1

[Article by Lieutenant Colonel V. Bilan: "Ukraine Will Never Have Strategic Tasks Beyond Its Borders"]

[Text] NOTES FROM A NEWS CONFERENCE FOR UKRAINIAN AND FOREIGN JOURNALISTS

As always, the latest news conference of the Ukrainian minister of defense aroused the lively interest of Ukrainian and foreign journalists. From the very first the representatives of the mass media, who had filled the hall to overflowing, were interested in the fate of nuclear weapons in Ukraine. And, primarily, in the following aspect of this problem: Did not Ukraine make a mistake by making a unilateral decision on nuclear disarmament?

It is true, stated the minister of defense, Ukraine unilaterally announced nuclear disarmament. And it produced this initiative in order to formulate its attitude toward nuclear arms in general. In the future Ukraine will contribute to disarmament processes in the world as well. Our state has proposed such an unprecedented initiative because this responds to its political course. This position is also part of our military doctrine, whereby relations between states are viewed as good-neighborly and should be built only on political foundations. Ukraine will never have strategic tasks beyond its borders. It has no territorial claims on any state, nor does it have a likely enemy of its own. Based on this, as early as July 1990 it announced its desire for a nonnuclear, nonaligned, neutral status.

As for the removal of tactical nuclear arms, continued the minister of defense, having honestly begun to fulfill our obligations, to a certain degree we lost time on the organization of control over the destruction of weapons taken beyond the borders of Ukraine. In particular, control was not organized on the international, interstate level. It turned out that to organize the removal of tactical nuclear weapons is easier (!) than control over their destruction. Thus the president of Ukraine, not having any data on the course of this important process, adopted the well-known ruling.

Now Ukraine will do all that it can to propose the makeup of such a commission and, in this fashion, put this process under control.

The problem of control interested many journalists. Still fresh in everyone's memory were the words of Leonid Kravchuk, who said that along with his job there would soon be technical equipment with the help of which the president would be able to have his finger on the nuclear pulse. Time was passing, and no one had mentioned such technical equipment since then. The minister of defense explained the situation:

A decision on uniform control was written into the Alma Ata accord. But at the same time, with regard to the states on whose territory nuclear arms are based, it was written that a decision on its use should be accepted by the heads of all four states. Ukraine stated nuclear arms would never be used from its territory.

And it was precisely for this purpose that not only political, but mechanical control on the part of our president was examined. But much time has now passed and, with the exception of political control, the head of our state has nothing. This is nothing but distrust between

states. And the ruling of L.M. Kravchuk stipulated that as a result—the out-shipment of nuclear arms; and Ukraine has a responsibility to the world community not for a regrouping of nuclear potential, but for its destruction.

And, of course, concerning the people stationed with the nuclear weapons. Recently our newspaper has often addressed the fate of units and combined units stationed in Ukraine and belonging to the makeup of the strategic forces of the CIS. What passions raged in Uzin alone! Incidentally, at the very beginning of the news conference we were told that Major General Mikhail Bashkirov was again in charge of the division that "rebelled."

Speaking about the problems of the people serving there, the minister of defense noted: At the very beginning of Ukraine's creation of its own Armed Forces, when we first defined ourselves as nonnuclear, we did not prepare to include in the Armed Forces military units pertaining to strategic arms. But with time, the leadership of the former Ministry of Defense began to make active attempts to take away from those units beyond the border of Ukraine equipment, property, and other material goods. As a result the situation becomes more complicated when officers, warrant officers, and members of their families are setting their hopes for their own further fate and life on the existence of these military units and, at the same time, they see the pace of the reductions and that these units may be left without equipment and arms and that people may be left by themselves with their social problems. Incidentally, the leadership of the former Moscow Ministry of Defense has no possibility of resolving these problems. Now that is the affair of Ukraine. And based on just this situation, people in shoulder boards have begun to define themselves, independently expressing their desire to transfer to service in the Ukrainian Armed Forces. Examples are well known of the great number of servicemen who have taken the oath of loyalty to the people of Ukraine. This reality has forced some to look anew at the status of these servicemen.

Let us recall: Back on 24 August 1991 the Ukrainian Supreme Soviet stated in a decree that all military units were to be under the jurisdiction of our state. Based on this, all citizens were protected by the laws of Ukraine.

The nuclear weapons are another question. The strategic units should be examined under the heading of social problems and the interests of the people who serve in them. If nuclear weapons are to be left in one set of hands and continue to be subordinate to a single command, then the people should be under the jurisdiction of Ukraine. If you decide it that way, then no one has the right, without the leadership of Ukraine, to release them from their duties or discharge them simply because they consider themselves citizens of Ukraine.

One can also say the same thing about the Black Sea Fleet, where circumstances are even more stirred up.

And no decisions are being made concerning it. Great hopes were placed on the recent meeting of the heads of states in Kiev.

Colonel General Konstantin Morozov reported that Ukraine proposed this question for the agenda of the meeting. Just before the meeting it was discussed for three days at the level of experts with representatives of Marshal of Aviation Yevgeniy Shaposhnikov. The position of Ukraine was based in particular on the interests of the personnel of the fleet, the sailors who are citizens of Ukraine but have not had the opportunity to define themselves on that issue. There are many well-known examples where officers and ensigns in the fleet have resigned from the ranks of the Armed Forces. There are also many undecided social problems in the fleet.

A draft agreement on the transfer of a portion of the Black Sea Fleet to the strategic forces by 1994 was proposed. This proposal corresponded to the rulings of the 14 February Minsk meeting of the heads of states, where it was stated that the list of units being transferred to the strategic forces is to be determined by the state on whose territory those forces are stationed. But the Moscow leadership was armed with another approach: They are forming a portion of the fleet which they are trying to transfer to the Ukrainian Armed Forces. Our proposal was rejected. This does not correspond, first, to the Minsk decisions and, second, to the tasks which the naval forces of Ukraine will fulfill. Review of the important question with regard to the Black Sea Fleet will again be postponed, and the existing problems will again be aggravated. Ukraine will protect its citizens.

"Beyond the borders of Ukraine serve on the order of 340,000 of our citizen-officers. What if we were to bring them all to their native land and create a good professional army?" asked and proposed a correspondent of the news service of Ukrainian radio.

The impulse of the citizens to serve Ukraine is great. They have already submitted 18,000 applications and 11,500 written statements. At the Ministry of Defense they believe that in the near future about 120,000 officers may petition to be returned to their homeland.

According to the proposal expressed by the radio station, theoretically it could be carried out, which would undoubtedly be very advantageous for Ukraine. But, as Colonel General Konstantin Morozov justifiably pointed out, the return of such a large quantity of officers at the same time is connected with very great social problems, especially with the shortage of housing. In this fashion the return will be gradual. A mechanism has already been worked out for the creation of an interstate department under the main directorate of personnel of the former Ministry of Defense of the Union, where the personal files of the officers are kept.

The ruling of the heads of states on the creation of a group in support of peace in the countries of the CIS was

also noted. The reporters asked whether Ukraine, "having its own opinion," will take part in the formation of such a group.

The response was as follows: Ukraine supported this idea as one contributing to peace. At the same time the Ukrainian Law on the Armed Forces contains an article stating that the use of the Armed Forces for tasks not connected with the defense of the state is the exclusive prerogative of the Supreme Soviet. Therefore, as he put his signature at the bottom of the document, President Kravchuk made the provision that such decisions would be made for each specific instance and only by the parliament.

Colonel General Konstantin Morozov answered a number of other questions as well.

Morozov Addresses Officers' Union

92UM0878A Kiev GOLOS UKRAINY
in Russian 7 Apr 92 p 7

[Article by GOLOS UKRAINY Military Commentator Valentin Labunskiy: "We Won't Let Anyone Rule Over Our Native Land"]

[Text] The 3rd Congress of Ukrainian Officers took place at the Military District Officers Club in Kiev on April 4-5.

Nine hundred eighteen delegates from all oblasts of Ukraine came to the forum. Foreign guests and Ukrainian officers who are serving in other CIS countries were also present.

Union Chairman new Ukrainian Army General V. Martirosyan (he was promoted to the rank of general on the eve of the congress) delivered a report. He said that the Union of Ukrainian Officers (UOO)—the only one in the CIS countries—is increasing its influence on Ukrainian Armed Forces personnel with each passing day. He sees his primary task in the consolidation of the Ukrainian officer corps for the purpose of preserving peace and calm in our country and in a decisive rebuff to those people who want to sneak into someone else's monastery with their own charter. V. Martirosyan spoke with alarm about the fact that Ukrainian patriots are still being persecuted in independent Ukraine, which has been recognized by 111 of the world's states. As an example, he cited the practice of General V. Asoyev from Nikolayev who is relieving officers of their duties for membership in the Union. Vilen Arutyunovich spoke with even greater indignation about the unlawful acts that have been committed in the Black Sea Fleet by Admiral I. Kasatonov. This protege of Yeltsin's is ignoring the laws of our state and is cruelly persecuting officers and naval warrant officers who have taken the oath of loyalty to Ukraine, but Kiev calmly watches as the martinet with admiral's shoulder boards rules his "sovereignty" in

Sevastopol. The UOO Chairman called on the Ukrainian President to immediately remove Kasatonov from the post of Black Sea Fleet commander and to form an alternative fleet command.

Russian Federation President B. Yeltsin's statement that Russia may claim the Black Sea Fleet as its own is compelling Ukrainian officers to demand more decisive actions from the President and the Commander-in-Chief of the Ukrainian Armed Forces.

The two most burning problems among the multitude of problems of building a national army—are the housing problem and the problem associated with the return of officers to Ukraine who are serving outside its borders. V. Martirosyan proposed beginning the creation of officer regiments and battalions to solve the latter problem.

Ministry of Defense Personnel Directorate Chief General V. Ignatenko told the congress that a special group has been created under the Ministry of Defense to return officers to Ukraine.

A conference of officers without apartments took place in Kiev on the eve of the congress. There are 63,000 officers without apartments in Ukraine. At the congress, having formed a fund for officers without apartments, V. Martirosyan appealed to Minister K. Morozov proposing the sale of excess military equipment and the use of the proceeds to build housing for officers. In his speech, Ukrainian Minister of Defense Colonel-General K. Morozov said that the Ukraine People's Movement for Perestroika [Rukh] had resulted in independence and the formation of Ukraine's own Armed Forces. "Thanks to it [Rukh] we have unity, a president, and as of December 1, independence"—citing the actual words of the minister. Having characterized the military-political situation as extremely complicated, Morozov noted that the return of Ukrainian officers to the homeland will help to Ukrainianize our army and therefore make it more combat capable. For the time being, nothing distinguishes the national army from the imperial army.

Having congratulated the congress on behalf of the Ukrainian Supreme Soviet, its First Deputy Chairman V. Durdinets noted that Ukraine is entering the international arena as a peace-loving, nonaligned state.

Ukraine is creating its own Armed Forces while proceeding from the principle that they will never be used against its own people or against the peoples of other countries. The army is being created only for the defense of the state. The defensive doctrine, which will soon be reviewed by the Supreme Soviet, declares Ukraine to be a peace-loving, nonaligned, nuclear-free state which is striving to become integrated in the European and world communities. Ukraine respects the sovereignty of other states but will not permit, said V. Durdinets, interference in its internal affairs or to have terms dictated to us.

There should be no other military formations in Ukraine, other than the Ukrainian army, border troops and national guard.

Events in Moldova require us to drastically improve combat training in the troops. To do this, said Vasiliy Vasilyevich, we need to rally the officer cadres and establish healthy, friendly relations in army collectives and to devote special attention to socio-legal protection of people in military uniform.

The congress elected Militia Lt Col G. Omelchenko the new Union of Ukrainian Officers Chairman and he defined the further structural development of the Ukrainian Armed Forces as the primary task of the officer corps.

Deputy Chief of 'Social Defense' Committee Discusses Tasks

92UM0879A Kiev NARODNAYA ARMIYA in Russian
11 Mar 92 p 1

[Interview with Major-General B.P. Lavrinенко, deputy chairman of the Committee for the Social Protection of Servicemen and Their Families, by Lt Col Mikhail Peselenov, NARODNAYA ARMIYA correspondent, under the rubric "First Interview in the New Position": "The Military Are State People"]

[Text] By decree of the Cabinet of Ministers of Ukraine Maj Gen Boris Prokopovich Lavrinenko has been appointed deputy chairman of the Committee for the Social Protection of Servicemen and Their Families.

B. Lavrinenko was born in 1936 in the village of Peskovka in Borodnyanskiy Rayon, Kiev Oblast, in a working-class family. He graduated from the Kiev Tank and Self-Propelled Vehicle School (now a combined-arms school) and two academies: armored troops and General Staff. He served in command staff positions in Ukraine. He devoted 10 years to the Transbaykal area and served as an adviser in Vietnam. In 1989 he was appointed deputy commander for civil defense of the Carpathian Military District.

[Poselenov] Comrade Major General, what do you view as the main areas of work in your new position?

[Lavrinenko] The return of all servicemen and their families to Ukraine is perhaps the main problem right now. And I would give priority to their return from hot spots in the Transcaucasus, where our military personnel have it particularly difficult. Everyday we hear from dozens of enlisted men, warrant officers and officers, their mothers and relatives concerned about their children or loved ones. Not a thing is heard from the latter for months on end. Letters do sometimes get through though. I recently read one of them from Rostov, which said that the servicemen are not receiving their pay and that the food situation has become very difficult. The families of many of them have left for Ukraine but receive no help from their husbands and are living off relatives. The fathers and mothers therefore ask the valid

question: When are our sons going to return to Ukraine and serve in its armed forces?

[Poselenov] Boris Prokopovich, we all know that the state of affairs is simply abnormal. And we cannot accept this. What do you see as the solution. And could you perhaps also tell us who will have to remove it from the agenda?

[Lavrinenko] There must be a presidential decree on the return of all servicemen to the homeland and the conclusion of an agreement among the nations where draftees from Ukraine are serving to send them home with compensation for the losses they may incur. We must work out a state program of social protection for the servicemen when they return to their native parts.

We receive many complaints about the fact that officers and warrant officers serving in the Transbaykal, the Transcaucasus and the Far East receive negative responses to their appeals. Those wanting to return to Ukraine are sometimes released into the reserve. Even after they had taken the oath of loyalty to our people, 19 officers were relieved of their duties by the commander at Vinnitsa, who gave them two weeks in which to find new positions and threatened to discharge them at the end of that period. These people visited our committee after they had been received by Col Gen Konstantin Morozov, minister of defense, who restored justice.

[Poselenov] With respect to this I would like to mention the fact that if we are to build a law-based state, then the law must hold sway in it....

[Lavrinenko] You are right in focusing attention on laws. They must have priority, of course. And in connection with this I would mention a second problem. It is that the new structure of the Ministry of Defense is in many ways functioning in the old way, not always heeding the needs of the people and attempting to send them to some other organization to have their problems resolved. I recently encountered a case of this. Lt Col V. Ivanov, an officer with the personnel directorate, sent an officer arriving from the Turkestan Military District and assigned to the Ministry of Defense of Ukraine to our committee instead of clearing up the officer's situation himself. We listened to his story, of course. The man was about to be released, but his mother was seriously ill and required nursing. Col Khaletskiy, our associate, called up the deputy chief of the personnel directorate, and the matter was resolved.

[Poselenov] Incidentally, Boris Prokopovich, many of the problems we are discussing today are very familiar to our readers. They know that they will be helped to resolve some of them in the Committee for the Social Protection of Servicemen and Their Families under the Cabinet of Ministers of Ukraine. That is, that you will help them. Not all of them are familiar with the structure of your organization, however, and do not know to whom specifically to turn. Not all of them have to go to its chairman, Vilen Arutyunovich Martirosyan, after all,

or to you. Please tell us a little bit about the committee's structure for those who are interested.

[Lavrinenko] We have worked out the following structure in accordance with the Law on the Social and Legal Protection of Servicemen and Their Families passed by the Supreme Soviet of Ukraine. The Directorate for the Social Protection of Servicemen of the Armed Forces of Ukraine is headed by Maj Gen Viktor Illarionovich Bochkarev. Col Ivan Pavlovich Khaletskiy is his deputy. Their area of responsibility includes the ground (land) troops, the air, air defense and naval forces, as well as all of the support troops who are a part of their structure.

The second directorate, for the social protection of personnel of the National Security Service, the National Guard and Internal Troops, is headed by Col of Militia Vladimir Pavlovich Nechiporuk. He has no deputy yet, but one will be appointed in the near future.

The following sections have been set up in our committee: legal, headed by Col Vladimir Viktorovich Stepanov; medical and sanitation, headed by Col Fedor Dmitrievich Tebeshevskiy; communications and public organizations, for which candidates have been selected; general section, headed by Lt Col Vitaliy Ivanovich Chechilo.

We have petitioned—and the Cabinet of Ministers has supported us—to have a department for the mothers of soldiers, which will see to it that officials deal with draftees and first-term servicemen in accordance with the law.

The possibility is not ruled out that the problems can grow in the future, and changes are possible in the organizational and staff structure.

[Poselenov] There are indeed many problems in our life. And you were probably right to think about a further growth of those problems. We are all aware of the forthcoming reduction of the armed forces. And this also means an influx of former servicemen into the national economy, their adaptation to the new conditions, and.... We could name a lot more. Because of this I would like to reflect a bit about how local authorities are dealing with the problems of servicemen already released.

[Lavrinenko] Right now—and this point should be emphasized—no clearly defined program of social protection has been worked out by the government. Although a law has been passed, the Cabinet of Ministers still has to work out the system for implementing it. And this must be done as soon as possible in order for the local executive agencies to know when to take action and what kind.

People are disturbed primarily by the housing question. Local authorities are not allocating apartments, and the military construction workers have neither the capability nor the funds.

[Poselenov] Since we have brought up the subject, it would probably be worthwhile to talk about the construction of cooperative housing and individual homes in the rural area.

[Lavrinenko] A very complex matter. Previously the Ministry of Defense paid an officer who had served 25 years 100% of the construction costs; 20 years, 75%; 15 years, 50%. This provision is also contained in the new draft. But just consider the following figures. Last year a three room apartment cost approximately 16,000-18,000, whereas it now costs more than 350,000. This means that a decision has to be adopted on construction financing, since the remaining 25%, let us say, amounts to 80,000-100,000, and certainly no officer or warrant officer has that amount.

[Poselenov] Boris Prokopovich, permit me to ask one final question. What is your situation with respect to premises for your work?

[Lavrinenko] We receive people in very cramped quarters. We have only two offices for all the services I have listed for you. The reception for legal matters, medical and sanitation and public matters, and the transfer of servicemen to Ukraine are all conducted simultaneously in one room. Here the committee chairman also receives foreign citizens and businessmen who want to help retrain reserve officers for civilian specialties and to allocate the funds for this. As you can see, we also have our problems. And we are also state people.

Ukraine Said To Consider Own Fleet Command

92UN1134A Moscow ARGUMENTY I FAKTY
in Russian No 14, Apr 92 p 1

[Unattributed article: "Black Sea Fleet 'in Dire Straits'"]

[Text] According to information from sources close to Ukraine's Rukh, an alternative Ukrainian command will be designated for the Black Sea Fleet in Kiev in coming days. Most likely, this action will be undertaken in response to Boris Yeltsin's decree concerning the transfer of the Black Sea Fleet to the jurisdiction of Russia. In the event of a development of this conflict, the consequences for the fleet may be most unfortunate. The problem is that a significant portion of the personnel of the Black Sea Fleet consists of draftees and of command personnel from both Ukraine and Russia. And from this point of view, the possibility that the fleet will come to a common decision—whom to subordinate itself to—is problematical. If things go badly, the fleet will be eliminated. Turkey will be able to establish full military supremacy over the Black Sea, and thus over the naval routes of Russia and Ukraine.

In the opinion of specialists, the leadership of Ukraine has an interest in complicating matters with the Black Sea Fleet, since this will permit it to distract public attention from the catastrophic situation in the economy of the republic. But, on the other hand, the economic difficulties together with other factors are beginning to

stimulate separatist tendencies in Ukraine, for example in the Crimea and, more recently, in Novorossiya (Odessa, Nikolayev, and Kherson Oblasts).

Carpathian MD Commander on Number Taking Ukrainian Oath

92UM0871A Kiev NARODNAYA ARMIYA in Russian
31 Mar 92 p 2

[Article by Captain Yevgeniy Partin: "Carpathian Military District"]

[Text]

Stepan Davymuka Puts Together His Team

On 20 March, Stepan Antonovich Davymuka was appointed the Ukrainian presidential representative for Lvov Oblast.

He was born in 1947 to a peasant family in the village of Chernilytsya, Gorodenskiy Rayon, Ivano-Frankovsk Oblast. He graduated from the Lvov Polytechnical Institute, is a candidate of technical sciences and the author of many innovations and inventions. He is married and has two children.

In his first speech before journalists in his new position, S. Davymuka noted that the main task at this stage is to create a new administration, which will work in place of the executive committees and their departments and administrations. The representative of the president considers dedication to the processes of creating a democratic state and competence as the basic criteria in selecting his team.

Glasnost in Work—the Commander's Principle

The commander of the Carpathian Military District [MD], Lieutenant-General V. Stepanov, held a scheduled press conference. Valeriy Nikolayevich [Stepanov] told journalists that the Western Operations Command will be created on the base of the Carpathian MD. Unlike the present structures, it is planned to shift to a corps and brigade system. Excess equipment will go to state reserve bases. Finally, troops will be freed from tasks not related to combat training.

This process is already under way and is proceeding according to the developed plans. It must be emphasized that troop combat readiness is being maintained at the proper level.

In his speech, the district commander noted, in particular, that to date 95 percent of the servicemen, including 82 percent of the officers, have taken the oath.

Presently, 680 officers who have not taken the oath have been sent back to armies of the Commonwealth of Independent States. At the same time, the reverse process is also taking place. A total of 201 men have been accepted and accommodated, and 615 have requested to

be transferred to Ukraine. Soldiers and noncommissioned officers not wishing to pledge allegiance to Ukraine have been sent outside its borders. An exception to this was 1,600 in their fourth period of service who had signed a contract agreement. They wished to complete their service in their own units.

In conclusion, Lieutenant-General V. Stepanov answered journalists' questions.

Carpathian MD Commander Describes Force Changes

92UM0884A Moscow KRASNAYA ZVEZDA in Russian
10 Apr 92 p 2

[Interview with Carpathian Military District Commander Lieutenant-General Valeriy Nikolayevich Stepanov by KRASNAYA ZVEZDA Correspondent Colonel V. Bogdanovskiy: "And It Is no Easier in the Ukrainian Army..."]

[Text] KRASNAYA ZVEZDA readers already know that the President of Ukraine has appointed Lieutenant General V. Stepanov commander of the Carpathian Military District. Our correspondent spoke with him.

[Bogdanovskiy] Valeriy Nikolayevich, the troops that have been entrusted to you since the beginning of this year are totally under the jurisdiction of Ukraine. However, all of their approved organizational structure still remains practically unchanged. Are any changes anticipated?

[Stepanov] A gradual reduction of troops is planned in accordance with the Ukrainian Armed Forces structural development concept and its defensive doctrine. Armed Forces reform will occur in several stages: the first stage—until the middle of 1995, and the second—until 1998. Specifically, a western operations command will be created based upon the Carpathian Military District. Fundamentally new corps and brigades will appear in place of the military structures that are operating right now. The reduction of troop strength will be carried out at the expense of reduced strength units and through the release of officers and warrant officers who have served the prescribed periods. We plan to concentrate all excess equipment based on a state reserve. Troops will begin to be involved only with combat training since they will be released from carrying out missions that are not inherent to them. As you know, this is far from the case right now.

In general, we have enough problems. The military district is experiencing difficulties with logistics support—especially with fuel and spare parts. As a result of this, the number of exercises and training sessions that are associated with the massive movement of men and equipment to ranges has been substantially reduced this year. Primary attention in training has been concentrated on improving individual training.

The nature of educational work has changed. Humanitarian training, the primary tasks of which are explaining

the specific features of the transition period to personnel and forming high psychological and moral stability among servicemen, has been organized in the troops instead of political classes.

[Bogdanovskiy] Incidentally, about educational work. With the creation of the Ukrainian Army, have we managed to free it from such characteristic negative phenomena for the USSR Armed Forces like "dedovshchina" [hazing of conscripts] and interethnic contradictions?

[Stepanov] It does not seem possible to boast of successes on this score. Some people had hoped that relations at variance with regulations [neustavshchina] would also disappear with a change in the composition of multiethnic collectives. Unfortunately, this did not occur. The number of deserters has also not declined. We conducted a sociological survey of servicemen, while studying their attitude toward the army. Only one in four wants to serve.

There was no such thing when I was drafted into the army. In Ukraine, it was considered shameful if a young man did not serve. So we need to exert a great deal of effort to once again raise the prestige of military labor. We are pinning a great deal of hope on the reform of the educational organs in the Ukrainian Armed Forces. We need officers who are distinguished by their high professionalism and ability to reach each person.

[Bogdanovskiy] Division-sized and smaller units which, as was said until quite recently, have a glorious combat history are deployed on the territory of Ukraine. Will their traditions be utilized hereafter in the education of servicemen? Will the question not be raised in the near future about redesignating, say, the Samara-Ulyanovsk Motorized Rifle and the Berdichev Railroad divisions and other celebrated division-sized and smaller units?

[Stepanov] We have already had the sad experience of striking out certain periods from our history. But life nevertheless compels us to return to the sources of the historical past. We cannot repeat similar errors. We need to use everything that is good and useful from the arsenal of military patriotic work in the former Armed Forces in the Ukrainian Army.

As for the redesignation of division-sized and smaller units, that is the prerogative of the Supreme Soviet.

[Bogdanovskiy] I would like to touch upon the difficult issue of returning officers who are Ukrainian natives to the homeland. Has the mechanism been worked out in this important matter and does the possibility exist to accept everyone who desires to be transferred?

[Stepanov] Our position is unambiguous: take everyone. But it is impossible to carry this out in a short period of time due to a whole series of circumstances that are primarily associated with the lack of housing and also the lack of vacant positions. There are 270 officers without

apartments in the Carpathian Military District headquarters alone and if we talk about officers and warrant officers in the troops, then half of them do not have their own housing. Now it has turned out that a soldier lives better than an officer. For example, a soldier is guaranteed 175 grams of meat per day. Even though an officer is supposed to receive a food ration, he does not receive it. At Kalinovskiy Aviation Garrison, the families of officers use imported water. Each day, 600 children have to be transported 15 kilometers to school. That is the life they lead.

We are also thinking about those servicemen who would like to continue their service in the homeland. A special group for the socio-legal protection of servicemen has been created. It helps those servicemen who would like to transfer to Ukraine and also those servicemen who, on the contrary, would like to continue serving in another CIS state for some reason or other.

[Bogdanovskiy] CIS OVS [Unified Armed Forces] units are also deployed on military district territory. Will you be cooperating with them?

[Stepanov] Of course. I think that the main thing here is for each commander of the CIS Allied Armed Forces to understand that no one has been given the right to interfere in the internal affairs of the sovereign state in which they are deployed.

Background to Officers' Union Congress

92UM0870A Kiev NARODNAYA ARMIYA in Russian
28 Mar 92 p 1

[Interview with Lt Col Vitaliy Chechilo, first deputy chairman of the Ukrainian Officers Union, by Maj Gennadiy Klyuchikov under the rubric "Toward the 3rd Ukrainian Officers' Congress": "For Consolidation and not Division"]

[Text] The next congress of the Ukrainian Officers' Union will be held in Kiev on 4-5 April. In the relatively short time which has passed since the last, 2nd Ukrainian Officers' Union Congress was held, fairly significant changes have taken place both in Ukraine's public-political life and within the Ukrainian Officers' Union. These changes require an in-depth analysis and certain adjustments in the functioning of this public organization's activists.

On the eve of the 3rd Ukrainian Officers' Union Congress, our correspondent met with Lt Col Vitaliy Chechilo, first deputy chairman of the Ukrainian Officers' Union.

[Klyuchikov] Why was it necessary to conduct this congress?

[Chechilo] Certainly not any sort of emergency. It was required by our charter. Summer is a time of discharges. There are, of course, more than enough political matters. This will all divert people. It is why our congress is to be held at the beginning of April.

[Klyuchikov] How is the political situation in which this congress will be held different?

[Chechilo] The current situation differs fairly significantly from that of the 2nd Ukrainian Officers' Union Congress. At that time we were demanding the establishment of a Ukrainian army, whereas the formation of the armed forces of the Ukraine is now in full swing. The status of members of the Ukrainian Officers' Union is no longer semilegal. Now no one and nothing can prevent us from giving our all to strengthen independent Ukraine and its armed forces.

This certainly does not mean, of course, that total victory has been achieved or that all of the tasks facing us have been accomplished. The social protection of servicemen has always been one of our main areas of work. And we have achieved certain positive results in this matter. Due in great part to the initiative of our public organization, the Committee for the Social Protection of Servicemen was set up under the Cabinet of Ministers of Ukraine. And it is fairly significant that the committee is headed by the chairman of the Ukrainian Officers' Union.

The Ukrainian Officers' Union members have taken a most direct and active part in the development of the draft law on social and legal protection for servicemen and their families. The provisions of this law, reinforced by specific steps taken by our president and government, give us hope that the servicemen will have all the conditions essential to carry out their service duties.

[Klyuchikov] You said that the persecution of Ukrainian Officers' Union members has now stopped. There has been no decrease in the number of complaints about arbitrary behavior by commanders "for political reasons," however. Why is this?

[Chechilo] Many "martyrs" have indeed turned up, people who have allegedly suffered because of their uncompromising struggle against the GKCh [State Committee for State of Emergency] for a free Ukraine. Unfortunately, however, experience has taught us to take a very cautious approach to assertions of this kind. A thorough investigation of more than one complaint has shown that the "steadfast warrior" was discharged from the armed forces for actions incompatible with the serviceman's honor and duty and discrediting this great title. Such people have never had anything in common with the Ukrainian Officers' Union and cannot count on its support.

The secretariat of the Ukrainian Officers' Union has adopted the following decision to suppress the enthusiasm of these dodgers for using our name to derive personal gain. Those officers who were discharged from the military purely for their political convictions should submit to us recommendations from the oblast division of the Rukh (URP), the oblast Ukrainian Officers' Union branch and a people's deputy. Only when we have these documents will the officers be heard at a regular plenum of the Ukrainian Officers' Union executive committee. If the decision on the matter is positive, the

union will petition the Ministry of Defense to reinstate the officer or revise the official reasons for discharge.

This decision of the Ukrainian Officers' Union secretariat has been sent to personnel agencies of the Ukraine's Ministry of Defense and the National Guard.

[Klyuchikov] There are reports that in some units there is still tension between the command element and the Ukrainian Officers' Union members. To what do you attribute this?

[Chechilo] I would like to see all of the regional Ukrainian Officers' Union organizations base their relations with the commanders of military units on the principles of mutual understanding and cooperation. All of us are now striving for a common goal, after all: the formation of powerful armed forces for the Ukraine. At this difficult time I therefore want to call upon the comrades-in-arms in the union to provide the commanders with every possible kind of support in the establishment of firm regulation order and the strengthening of the unit's combat readiness.

It is time to cast aside all our arrogance and grievances and work toward consolidation of the armed forces and not toward their division. Right now it is difficult for everyone. We should therefore not be engaging in petty squabbling but in the actual development of our own army. If we do this we will not have time for all sorts of nonsense.

[Klyuchikov] In addition to the problems enumerated, what others are going to be brought to the attention of the congress delegates?

[Chechilo] One of the most acute problems at the moment is the return of servicemen who are citizens of Ukraine but have been serving outside its borders. Unfortunately, this matter is being resolved too slowly at the state level. This is precisely why the Ukrainian Officers' Union is taking an active part in the development and implementation of its own plan for the return of our fellow citizens.

One other area of our work involves seeing to it that no serviceman is ever mistreated because of nationality in the units and subunits. The higher various reactionary trends rear their heads, the harder this task becomes. They must be rebuffed in an organized manner for the preservation of our gains.

[Klyuchikov] Some people are of the opinion that the Ukrainian Officers' Union should in time become a trade union for military personnel.

[Chechilo] I do not support that opinion. I am confident that our public organization should not only resolve professional issues but should also take a most active part in the building of a free Ukraine and its armed forces, and directly influence the personnel policy of the Ministry of Defense.

[Klyuchikov] I have heard the opinion expressed that the Ukrainian Officers' Union leadership is increasingly separating itself from the lower organizations, from their problems and concerns.

[Chechilo] There is practically no bureaucracy in our organization. The central agency consists of just two full-time workers.

If one can speak of any sort of separation, it would not be ideological but rather an operational informational gap. It is particularly difficult to establish and maintain contacts with the regional organizations "For the Return of Servicemen to the Homeland," for servicemen stationed in Central Asia, the Baltic nations and the Transcaucasus.

As far as ideological divergences go, I do not believe there are any.

[Klyuchikov] Is Col V. Martirosyan not prevented by his service duties from fully performing all the jobs assigned to the Ukrainian Officers' Union chairman?

[Chechilo] That is a matter for the congress delegates to decide, whether Martirosyan is to continue performing the duties of Ukrainian Officers' Union chairman. For myself, I have firmly decided to apply for retirement from the position of first deputy Ukrainian Officers' Union chairman. This position requires one's all and should be performed by a full-time worker.

My work on the Committee for the Social Protection of Servicemen under the Cabinet of Ministers takes up a lot of my time. It is against my principles to occupy an honorary position.

Officer's Union Faces New Tasks

92UM0887A Kiev NARODNAYA ARMIYA in Russian
4 Apr 92 p 2

[Article by Col Aleksandr Pavlenko, chairman of a primary SOU [Ukrainian Officer's Union] organization: "A Time for Vigorous Action"]

[Text] I consider that talk about how the Ukrainian Officer's Union should be transformed in the current situation practically into a military trade union to be groundless and inappropriate. Talk about adjusting its program objectives and altering certain approaches to their achievement is another matter. There are indeed grounds for thought and something to say here.

At the present time I propose that the union should work primarily on those tasks which would promote the most rapid possible reform of the army and navy and the establishment of highly professional armed forces capable of reliably defending the peaceful labor of our people. Its main area of work should therefore be that of transforming the military collectives into a real school of moral and intellectual development of the military individual.

The union should also strive for a fundamental reform of the combat and humanitarian training, strive actively to see that the indoctrination of the personnel is based on the spiritual and cultural heritage of the Ukrainian people and the history of its military art, and promote the Ukrainian language in military life.

It is also time to restore the concept of an officer's honor. The development of a Code of Honor of an Officer in the Armed Forces of Ukraine should be placed onto the list of priority Union tasks.

At the same time Union members are obligated to strive for purity in their ranks. He whose conduct defames the lofty title of officer has no place in the SOU or in the armed forces of Ukraine. For such cases it would be appropriate to vest the primary organizations with authority to petition the ministry of defense for early discharge of thieves, bribe-takers, drunks and idlers from the army.

The Union should achieve a situation in which advancements to higher positions are made only on a competitive basis, and officers who are citizens of Ukraine but are currently serving outside of our state must be able to compete.

Every officer must understand that he can receive reliable social protection only from a strong and independent state with a highly professional and battleworthy army. Conscientious military labor is therefore our real contribution to the development of such a power.

Nor should we forget the upcoming generation. Its preparation to serve in the army or navy is a priority area of the Union's work. We in the Ukraine have experience in developing young men and women. In such organizations as Plast and Sech, among others. Right now it is important to revive these patriotic movements and give them a modern orientation.

All of the Union's previous functioning has demonstrated that without its own press agency and funds it is extremely difficult for it to pursue its program objectives. I believe that the press agency should be a weekly newspaper. The congress should discuss this problem, and the secretariat should resolve it in the immediate future.

The congress delegates should devote special attention to developing the machinery for implementing the tasks and objectives facing the Union. Neither the executive committee nor the secretariat has one at this time. Many valuable proposals and even statutory tasks exist only in writing.

We should also resolve the matter of commercial activities for the Union, because practically no assistance is possible for those in need out of the membership dues, and the implementation of other program tasks is subject to doubt.

BYELARUS

Local Recruits Solve Language Problems

92UM0877A Moscow KRASNAYA ZVEZDA in Russian
8 Apr 92 p 2

[Article by KRASNAYA ZVEZDA Correspondents Colonels V. Kovalev and P. Chernenko, under the rubric: "Army in the New Conditions": "In the Companies—Compatriots From the Same Country"]

[Text] As we all know, many division-sized and smaller units that are deployed on the territory of the sovereign states are being manned primarily by local conscripts. For example, more than 80 percent of the conscripts at the BVO [Byelarus Military District] District Training Center are natives of Byelarus.

What mark is this leaving on the lives, combat training and service of the personnel?

Soldiers of only nine nationalities are currently serving in the tank training regiment commanded by Colonel Vyacheslav Marchenko, versus 37 nationalities a year ago. Based on conversations with officers, this circumstance has eliminated one of the most critical problems: previously they had to spend more time teaching the Russian language than military matters during the first few weeks with new recruits. Now the issue is no longer relevant.

The comparatively high general education level of young people is also having a positive impact on the effectiveness of the training process. Officers assert that it is entirely possible to reduce the training time of specialists for the troops by nearly a month without having a detrimental impact on quality with a contingent like the one they have right now. You will agree that this is quite important under conditions of the transition to an 18-month term of service.

There are also other pluses. In the words of Assistant Training Center Commander for Personnel Lieutenant Colonel Gennadiy Novik, the division of soldiers into friendly associations of people according to ethnic origin has disappeared and mutual relations among them have become more even-tempered and friendly. The commonality of language, customs, habits, traditions, and morals is drawing people closer together and is facilitating adaptation to military collectives.

In a word, manning units with civilians of one republic has eliminated many problems which had seriously complicated the lives of commanders and educators. Many, but not all problems...

"I admit that I doubted from the very beginning that manning our subunits with conscripts from Byelarus alone would immediately improve discipline," Training Center Commander Major-General Oleg Yatskevich told us. "The outbreak of crime, disrespect for the law, the breakdown of educational work with young people,

and the decline of morality in society—from where could we expect disciplined new recruits?"

In the general's words, sc diers who are absent without leave from their units cause particular concern. Previously, they were primarily natives of other republics who had been worn down by rumors of the "parade of sovereignties." It would seem that desertion will end in and of itself after the center is manned with Byelarusian citizens. However, the number of deserters is not declining: more than two dozen Byelarusian soldiers left their units during the last four months. They are not deserting due to the notorious dedovshchina [hazing of conscripts]—there is practically none at the center due to the specific local conditions. They do not like the discipline, strict routine, and the tension of service, they name longing for home, girls, and... confidence that they will not be punished. Yes and the oath, administered to the people of Byelarus for the first time, has not become a reliable anchor as many people had hoped.

The first "ethnic" recruiting also brought a series of other unexpected problems. Specifically, the training center turned out to be unprepared for the massive pilgrimage of soldiers' parents, relatives, friends, and girl friends.

"References to service, details, guard duty, and the daily routine do not help," Deputy Tank Training Regimental Commander for Personnel Lt Col Vladimir Kartashov told us. "There is one response to all of our arguments: We do not know anything, give us our lad. And having obtained the soldier, they frequently return him to the barracks in a drunken state."

The officers-educators have faced difficult issues. Since the majority of their charges are citizens of sovereign Byelarus, therefore, we need to restructure the education process while considering this reality. But how? What should its content be right now and what should the emphasis be in work with people? Here there is no clarity for the time being.

Or this recommendation: create an experimental company and conduct training in it in the Byelarusian language. But no one knows who will be involved with this and using which teaching methods.

Of course, the facts provided by four months service at the military district training center of the soldiers who have been drafted from Byelarus are still not grounds for broad generalization but they attest to the fact that this manning yields not only pluses. And the people on whose shoulders lie concerns about creating national armies need to keep that in mind.

CENTRAL ASIAN STATES

Nazarbayev Issues Decree on Conscription
*92UM0873A Moscow KRASNAYA ZVEZDA in Russian
 4 Apr 92 p 1*

[Article by Colonel A. Ladin, under the rubric: "Direct Line: Yesterday KRASNAYA ZVEZDA Correspondents Transmitted": "From Alma-Ata: They Are Playing 'Farewell Slav' in Kazakhstan. Nazarbayev Has Issued a Decree on Release and Conscription"]

[Text] Recently when encountering people who have been released into the reserve, the conversation has begun with one and the same question: how much time do they have left to serve?

The 31 March 1992 Republic of Kazakhstan Presidential Decree on the release of servicemen into the reserve who have served the prescribed period of military service and on the next conscription of citizens for active military service in April-June 1992 in the Republic of Kazakhstan has removed tension in military collectives.

In accordance with the Decree, soldiers and sergeants of border, internal, and railroad troops and military construction units that are deployed on the territory of the Republic of Kazakhstan, who have served the prescribed period of active military service, are being released from the ranks of the CIS Allied Armed Forces in April-June 1992.

Turkmenia Decree on Servicemen in Other Republics

*92UM0874A Ashkhabad TURKMENSKAYA ISKRA
 in Russian 24 Feb 92 p 1*

[Turkmenistan Presidential Decree, signed by Turkmenistan President S. Niyazov, 22 February 1992, Ashkhabad: "Turkmenistan Presidential Decree"]

[Text] Turkmenistan Presidential Decree on the release into the reserve of servicemen who are performing compulsory active military service on the territory of Turkmenistan and the quartering of servicemen—citizens of Turkmenistan who are arriving from other states of the Commonwealth of Independent States.

To quarter compulsory service personnel—citizens of Turkmenistan who are arriving from other states of the Commonwealth of Independent States and to create conditions they require for further performance of military service, I resolve:

1. To release from active military service into the reserve servicemen who have been conscripted in May-June 1990 who are performing active compulsory military service on the territory of Turkmenistan with the exception of servicemen of the border and internal troops.
2. The Turkmenistan Ministry for Defense Affairs will quarter servicemen—citizens of Turkmenistan who are arriving from military units, that are deployed on the territory of other states of the Commonwealth of Independent States, at division-sized and smaller military units and military construction detachments deployed on the territory of Turkmenistan, for further performance of active military service until the expiration of the periods of military service prescribed by law.
3. This Decree enters into force from the moment it is signed.

[Signed] Turkmenistan President S. Niyazov

Ashkhabad, 22 February 1992

DEFENSE INDUSTRY

Privatization of Polet Aviation Association

92UM0849A Moscow BIZNESS REVYU in Russian
No 2 (7), Feb-Mar 92 p 10

[Article by Aleksandra Osokina under the rubric "Conversion": "Investors With Their Eyes Open: Experience in Privatizing a Large Defense Enterprise"]

[Text] The aviation plant in Omsk has become a joint-stock company of the free rear area. The workers have elected a director and formed a directors' council. The new AO [joint-stock company] is a member of the Polet Production Association. Polet is one of the world's largest researchers and manufacturers in the field of missile and space technology. The joint-stock company is mastering the AN-74 multipurpose aircraft, which will go into production at the end of '92.

The Omsk aviation engineering enterprise, established in 1941, has not built aircraft for 30 years now. Polet's main product, missile-space and satellite systems, has recently put the enterprise into a survival mode due to a lack of missile orders.

Vyacheslav Ivanovich Kotelnikov, member of the Subcommittee on Science and New Technology of the Committee on Science and Education of Russia's Supreme Soviet, made the plant's re-specialization a part of his preelection program. The conversion threatened to bring total unemployment to the region, where almost all of the large enterprises are engaged in space and defense work. The plant, where the Tupolev Design Office was once located and where Korolev worked, had to resurrect its aircraft production. This was the most natural conversion route for it.

I asked Vyacheslav Ivanovich Kotelnikov to tell about the problems encountered by the future operators of a joint-stock company. A large defense enterprise, conversion and privatization produce a whole mass of difficulties, still unresolved for many enterprises.

When Vyacheslav Ivanovich began telling about his AN-74, we digressed from the main subject for a long time. His animated description convinced me that there is no better aircraft than the AN-74. This aircraft is essential in the Arctic. Its cargo and passenger capacity is irreplaceable in the North. It does not have pressure fluctuations. This was done to protect the people, since the aircraft is highly maneuverable. The "dark cockpit" is convenient for the pilots. Nothing superfluous is lighted up on the panels. All the essential data are depicted on a display screen.

The KGB was one of the customers for the aircraft. The AN-74 can fly very low not just over land but also over water and lower a probe. Its wings can serve as radar antennas.

The aircraft must indeed be a good one, if numerous "high offices" have come to believe in the promise its production holds, and then private investors got into the act with their capital.

The money was invested "with eyes open." They looked over all the documents and computed everything for several years into the future. Money was invested in future aircraft, 10 of them at the aircraft's price right now, and production is getting underway with this money. When the aircraft are produced, private shareholders will purchase them at the new market prices. That is, they will pay the new, increased price.

The joint-stock company is set up on the basis of state priority: 49% of the shares belong to private capital, while the state has the controlling block.

With respect to the sale of the future ANs, the private shareholders are setting up their own aircraft company and, depending upon the demand in the market, will either sell the aircraft or use them for hauling purposes. The production association has a share in the aircraft company and is currently leasing aircraft to it.

"One of the most important factors of private investment," Vyacheslav Ivanovich believes, "is the fact that the investor/shareholder will monitor all outlays, which means that the money will not be squandered."

The darkest stain on the conversion is the desire to take advantage of a good thing at the large defense enterprises. Internal cooperatives are ordinarily set up in order to create a highly paid group of one's own people, whom it is easy to control and through them, to control others.

The main trouble is that strategic raw materials are going from the large plants abroad for a price of next to nothing. At the Omsk plant this is done through a joint enterprise, from which unlicensed aluminum is shipped to Switzerland as facing tiles. All of the workers know this and write letters to me as a deputy. In response to my inquiry, the director replied: "Commercial Secret."

It makes no sense to combat things like this at each enterprise separately. They could be halted with a normative document from the president or vice president.

Very reliable people work in the defense industry. They understand what a market is and are prepared to sell their labor at its true value.

Since every defense enterprise is disciplined, it can switch to a different, needed product at any time. I would ask Russia's leaders not to forget that they are the managers of this property. They need to manage and not squander it.

The state should not surrender its authority as coordinator. The current free prices for oil and coal will lead to nothing good. There is no tariff agreement. The end

product is going for an impossible price. The price of aluminum approaches that of silver, titanium that of gold.

Prices can be freed only for the finished product. In our extreme situation there must be state control over the main products of the main branches, those upon which our survival depends.

Private capital will not take on the dirty, heavy, thankless production of oil, steel or iron. The exchange stands between those who pump the oil and those who process it. If the state does not intervene in the flood of energy agents, the raw-materials exchanges will ruin us.

Contracts and not barrels are sold at raw-materials exchanges in the West. There is a guarantee of delivery,

and a consumer's financial guarantee. Here a commodity can be sold and resold many times en route, as a result of which prices climb to a level which makes it impossible to sell, but it is still profitable abroad.

Private enterprise by itself will not save Russia. For selling Polet shares, we have firmly reserved 51% for the state and established mutually profitable relations with the private investors/shareholders.

Any private initiative has to be fostered by the state, and the state makes its own rules of the game. A wise state should understand that a loss for its partners does not mean victory for itself. Only an honest game and mutual interest on the part of the participants will produce overall good results.

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